

Henry Dreyfuss SYMBOL SourceBOOK

**An Authoritative Guide to
International Graphic
Symbols**

Foreword by R. Buckminster Fuller



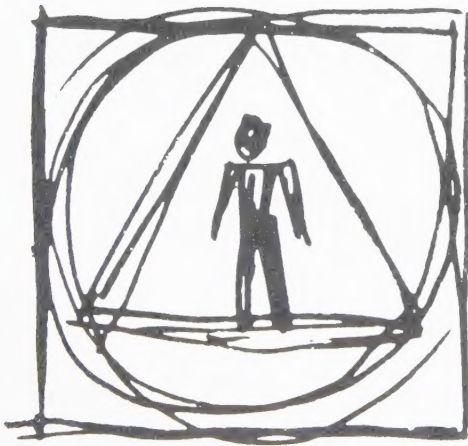


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SYMBOL SOURCEBOOK

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SYMBOL

An Authoritative Guide

HENRY DREYFUSS

SOURCEBOOK

to International Graphic Symbols



VAN NOSTRAND REINHOLD COMPANY

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H.D.

To Doris
for untold amounts of encouragement,
imagination, industry, patience, and
endurance.



CONTENTS

ENGLISH	ARABIC	CHINESE
FOREWORD—R. Buckminster Fuller	14 R. Buckminster Fuller — تقديم	前言 —R. Buckminster Fuller 14
INTRODUCTION	16 مقدمة	序論 16
SEMANTOGRAPHY—C. K. Bliss	22 C. K. Bliss — سمنتوغرافى	語意圖解—C. K. Bliss 22
ISOTYPE—Marie Neurath	24 Marie Neurath—ISOTYPE	ISOTYPE—Marie Neurath 24
BASIC SYMBOLS	26 الرموز الاساسية	基本符號 26
DISCIPLINES	26 نظم	學科 26
Accommodations and Travel	34 السفر ومحطات الانطلاق والعودة	供應和旅行 34
including Terminals	كامله	包括終站
Agriculture	39 الزراعة	農業學 39
Agronomy, Livestock and Dairy	الهندسة الزراعية، ومشتج الالبان	農藝、家畜和乳類產品、農場
Products, Farm Structure and	والمواشى وتنظيم المراعى والاراضى،	建築和土地、森林、器具
Lands, Forestry, Implements	علم الغابات والادوات الزراعية	
Architecture	48 الهندسة المعمارية	建築學 48
Drafting, Landscaping and	وضع الرسومات، مسح الاراضى	製圖、風景設計和計劃
Planning	والخريطة	
Astronomy	54 علم الفلك	天文學 54
Biology	55 علم الاحياء	生物學 55
including Botany, Molecular	ويشمل علم النبات والعلايا	包括植物學、分子生物學
Biology	الحية	
Business	58 اعمال	商學 58
including Computers,	وتشمل العقول الالكترونية	包括電子計算機、零售商店、
Office Equipment,	و تجهيزات المكاتب، والحواش	採購和服務
Shops and Services	والخدمات	
Chemistry	67 الكيمياء	化學 67
Communications	70 وسائل الاتصال	通訊 70
including Movement and Dance,	وتشمل الحركة	包括動作和舞蹈、手語或旗語
Non-graphic Alphabets	والرقص والرموز والاشارات	
Engineering	80 الهندسة	工程學 80
Chemical, Electrical,	الكسائية والكهربائية	化學的、電機學的、機械的
Mechanical	والميكانيكية	
Folklore	86 التراث الشعبي	民俗學 86
Alchemy, Astrology,	الكسائية، النجعة النجوم والرموز	鍊金術、占星學、流動工人交通
Hobo Signs	المستعملة من المبحولين والمتردين	記號或標誌
Geography	92 الجغرافيا	地理學 92
Geology	96 علم طبقات الاراضى	地質學 96
Handling of Goods	98 تعبئة ونحن السلع	貨品處理 98
Home Economics	100 التدبير المنزلى	家政學 100
including Appliances	ويشمل الادوات	包括設備
Manufacturing	104 التصنيع	製造 104
including Heavy Duty Machinery	ويشمل الماكينات الثقيلة	包括重型機械
Mathematics	111 الرياضاة	數學 111
Medicine	113 الطب	醫學 113
including Equipment,	ويشمل الادوات الطبية و	包括儀器、醫院
Hospitals	المستشفيات	
Meteorology	120 الارصاد الجوية	氣象學 120
Music	123 الموسيقى	音樂 123
Photography	126 التصوير	攝影學 126
Physics	128 علم الطبيعة	物理學 128
Recreation	130 الترفيه	娛樂 130
including Olympics	ويشمل الاولمبيات	包括運動競技
Religion	138 الدين	宗教 138
Safety	140 الامن	安全 140
Traffic	143 المرور	交通 143
Road, Air, Marine, Rail	الطرق، الجو، البحر،	陸路、航空、航海、鐵路
Vehicle Controls	157 مراقبة المركبات	車輛控制 157
including 3-Dimensional	ويشمل اشكال ذات ابعاد	包括三度空間之形狀
Shapes	الشكل التخطيطى	
GRAPHIC FORM	166 لون	圖解形式 166
COLOR	231 اهداءات	顏色 231
ACKNOWLEDGMENTS	248 بيان المراجع	銘謝 248
BIBLIOGRAPHY	252 فهرس	參考書目 252
INDEX	268	附錄 268

DANISH	DUTCH	FINNISH
FORORD—R. Buckminster Fuller 14	VOORWOORD — R. Buckminster Fuller 14	ESIPUHE—R. Buckminster Fuller 14
INDLEDNING 16	INLEIDING 16	JOHDANTO 16
SEMANTOGRAFI—C. K. Bliss 22	WOORDKUNDE — C. K. Bliss 22	MERKITYSOPPI—C. K. Bliss 22
ISOTYPE—Marie Neurath 24	ISOTYPE — Marie Neurath 24	ISOTYPE—Marie Neurath 24
GRUNDSYMBOLER 26	BASIS SYMBOLEN 26	PERUSMERKIT 26
DISCIPLINER	STUDIE VAKKEN	LAIT
Lokaleforhold og Rejser 34 indbefattet Stasjoner	Logies en reizen 34 met inbegrip van aankomst- en vertrek faciliteiten	Majoitusmahdollisuudet ja matkailu.. 34 mukaanlukien pääteasemat
Landbrug 39 Agronomi, Kreaturer og Mejeriproduk- ter, Landbrugsbygninger og Løsøre exclu- sive Maskiner, Forstvæsen, Redskaber	Landbouw 39 Landbouwkunde, vee en zuivelproducten, landbouwconstructies en bouwlanden, bosbouw, landbouwgereedschap	Maanviljelys 39 Maatalous, karja ja maitotuotteet, maatilan rakenne ja maat, metsätalous, maanviljelyskalusto
Arkitektur 48 Udkast, Havearkitektur og Planlægning	Bouwkunde 48 Ontwerpen, landschaps-architectuur en ruimtelijke ordening	Arkkitehtuuri 48 Piirros, maisema ja suunnittelu
Astronomi 54	Sterrenkunde 54	Tähtitiede 54
Biologi 55 indbefattet Botanik, Molekylær Biologi	Biologie 55 met inbegrip van plantkunde en moleculaire biologie	Biologia 55 mukaanlukien kasvitiede, molekyyli- biologia
Forretninger 58 indbefattet Regnemaskiner, Kontorudstyr, forretning og Tjenester	Handel 58 met inbegrip van computers, kantoor- benodigheden, winkels en dienstverleningsbedrijven	Kauppa 58 mukaanlukien tietokoneet, toimistovä- lineet, myymälät ja palvelu
Kemi 67	Scheikunde 67	Kemia 67
Forbindelser 70 indbefattet Bevægelse og Dans, Ikkegrafisk Alfabet	Communicatie 70 met inbegrip van beweging en dans, niet-grafische alfabetten	Kanssakäyminen 70 mukaanlukien liike ja tanssi, erikoismerkit
Ingeniørvirksomhed 80 Kemi, Elektrisk, Mekanisk	Ingenieurswetenschappen 80 Scheikundig, electrisch en werktuigbouwkundig	Insinööritaito 80 kemiallinen, sähkö, mekaaninen
Folklore 86 Alkemi, Astrologi, Landstrygertegn	Folklore 86 Alchemie, Astrologie en tekens door landlopers gebruikt	Kansantietous 86 alkemia, astrologia, maankiertäjien merkit
Geografi 92	Aardrijkskunde 92	Maantiede 92
Geologi 96	Geologie 96	Geologia 96
Varehusholding 98	Behandeling van goederen 98	Tavaroiden käsittely 98
Økonomisk Hjemmeerhverv 100 indbefattet Indredninger	Huishoudkunde 100 met inbegrip van huishoudelijke apparaten	Kotitaloustiede 100 mukaanlukien kotitalouskojeet
Fabrikation 104 indbefattet Tungt-Maskineri	Fabricage 104 met inbegrip van zware machines	Tehdastuotanto 104 mukaanlukien raskaat koneet
Matematik 111	Wiskunde 111	Matematiikka 111
Medicin 113 indbefattet Udstyr og Sykehus	Geneeskunde 113 met inbegrip van uitrusting en ziekenhuizen	Lääketiede 113 mukaanlukien välineistö, sairaalat
Meteorologi 120	Weerkunde 120	Ilmatiede 120
Musik 123	Muziek 123	Musiikki 123
Fotografi 126	Fotografie 126	Valokuvaus 126
Fysik 128	Natuurkunde 128	Fysiikka 128
Adspredelser 130 indbefattet Olympiske Lege	Ontspanning 130 met inbegrip van Olympische Spelen	Virkistys 130 mukaanlukien olympialaiset
Religion 138	Godsdienst 138	Uskonto 138
Sikkerhed 140	Veiligheid 140	Turvallisuus 140
Færdsel 143 Landevej, Fly, Søfart, Jernbaner	Verkeer 143 weg-, lucht-, scheeps- en spoorwegverkeer	Liikenne 143 Maantie, ilma, meri, rautatie
Køretøj Kontrol 157 indbefattet Tredimensionale Former	Voertuig instrumenten 157 met inbegrip van 3-dimensionele vormen	Ajoneuvojen valvonta 157 mukaanlukien kolmiulotteiset muodot
GRAFISKE FORMER 166	GRAFISCHE VORM 166	GRAAFFINEN MUOTO 166
FARVE 231	KLEUR 231	VÄRI 231
ANERKENDELSER 248	MEDEWERKERS 248	TIEDOKSIANTOJA 248
BIBLIOGRAFI 252	BIBLIOGRAFIE 252	BIBLIOGRAFIA 252
INDEKS 268	INDEX 268	HAKEMISTO 268

FRENCH

PREFACE—R. Buckminster Fuller	14
INTRODUCTION	16
SEMANTOGRAPHIE—C. K. Bliss	22
ISOTYPE—Marie Neurath	24
SYMBOLES DE BASE	26
DISCIPLINES	
Locaux touristiques et déplacements	34
y compris stations terminales	
Agriculture	39
Agronomie, Bétail et produits laitiers,	
Bâtiments agricoles et terrains,	
Sylviculture, Outils	
Architecture	48
Dessins et plans, Aménagement des	
jardins et planification	
Astronomie	54
Biologie	55
y compris Botanique, Biologie	
moléculaire	
Affaires	58
y compris Ordinateurs, Matériel de	
bureau, Magasins et services	
Chimie	67
Communications	70
y compris Mouvement et Danse,	
Alphabets non-graphiques	
Etudes techniques d'ingénieur	80
chimique, électrique, mécanique	
Folklore	86
Alchimie, Astrologie, Code des	
vagabonds	
Géographie	92
Géologie	96
Manutention des marchandises	98
Economie ménagère	100
y compris Equipement ménager	
Fabrication	104
y compris Machines pour gros travaux	
Mathématiques	111
Médecine	113
y compris Equipement, Hôpitaux	
Météorologie	120
Musique	123
Photographie	126
Physique	128
Recréation	130
y compris Jeux olympiques	
Religion	138
Sécurité	140
Circulation	143
Routière, Aérienne, Maritime,	
Ferroviaire	
Contrôle des véhicules	157
y compris code de la route en trois	
dimensions	
FORMULAIRE GRAPHIQUE	166
COULEUR	231
REMERCIEMENTS	248
BIBLIOGRAPHIE	252
TABLE DES MATIERES	268

GERMAN

VORWORT—R. Buckminster Fuller	14
EINLEITUNG	16
SEMANTOGRAPHIE—C. K. Bliss	22
ISOTYPE—Marie Neurath	24
GRUNDSYMBOL	26
FACHGEBIETE	
Unterkunft und Reise	34
einschliesslich Endstationen	
Landwirtschaft	39
Ackerbau, Viehzucht, und Milchwirt-	
schaft, landwirtschaftliche Bauwerke	
und Boden, Forstwirtschaft, Geräte	
Baukunst	48
Entwürfe, Landschaftsgestaltung	
und Planung	
Astronomie	54
Biologie	55
einschliesslich Pflanzenkunde,	
Molekularbiologie	
Geschäft	58
einschliesslich Rechenmaschinen,	
Büroausstattung, Läden und	
Dienstleistungen	
Chemie	67
Nachrichtenwesen	70
einschliesslich Bewegung und Tanz,	
schriftlose Alphabete	
Ingenieurwesen	80
Chemisches, Elektrisches,	
Maschinenbau	
Volkskunde	86
Alchemie, Astrologie, Zeichen der	
Landstreicher	
Erdkunde	92
Geologie	96
Güterbeförderung	98
Hauswirtschaft	100
einschliesslich Haushaltsgeräte	
Industrielle Produktion	104
einschliesslich Schwerindustrie	
Mathematik	111
Heilkunde	113
einschliesslich Ausrüstung, Spitäler	
Meteorologie	120
Musik	123
Photographie	126
Physik	128
Erholung	130
einschliesslich Olympischer Spiele	
Religion	138
Betriebssicherheit	140
Verkehr	143
zu Land, Luft, Wasser und auf Schienen	
Fahrzeugkontrolle	157
einschliesslich dreidimensionaler	
Formen	
GRAPHISCHE FORM	166
FARBE	231
DANKSAGUNGEN	248
BIBLIOGRAPHIE	252
INDEX	268

HEBREW

14	R. Buckminster Fuller — הקדמה
16	מבוא
22	C. K. Bliss — סמנטוגרפיה
24	Marie Neurath — ISOTYPE
26	סמלים יסודיים
34	אכסון ונסיעות
	כולל תחנות
39	חקלאות
	אגרונומיה, מקנה ותוצרות חלב
	מבני משק ומקדעות
	יערות, מכשירים
48	אדריכלות
	שרטוטים
	שפור נוף ותכנון
54	תורת רכוכים
55	ביולוגיה
	כולל בוטניקה,
	ביולוגיה מולקולרית
58	עסקים
	כולל מחשבים,
	מכשירי משרד
	חנויות ושירותים
67	כימיה
70	תקשורת
	כולל תנועה ורקוד,
	אפיקיות ראציונריות
80	הנדסה
	כימית,
	חשמלית, מכנית
86	פולקלור
	אלכימיה,
	אסטרונומיה, סימני נודים
92	גאוגרפיה
96	גאולוגיה
98	טיפול בסחורה
100	כלכלת הבית
	כולל מכשירי בית
104	יצור
	כולל מכונות כבדות
111	תורת החישוב
113	רפואה
	כולל ציוד, בתי חולים
120	מטאורולוגיה
123	מוסיקה
126	צלום
128	פיסיקה
130	בידור
	כולל המשחקים האולימפיים
138	דת
140	בטיחות
143	תנועה
	מכשירים, איור
	יב מסרות בלוג
157	פקוח רכב
	כולל ציודים תחבורתיים
166	צורת ציור
231	צבע
248	הודאות
252	ביבליוגרפיה
268	מפתח

HINDI

प्रक्कथन — R. Buckminster Fuller	14
परिचय	16
चिह्न का प्रयोग — C. K. Bliss	22
ISOTYPE— Marie Neurath	24
आधारित चिह्न	26
अनुशासन	
वास्थान और यात्रा	34
सोमात सहित	
कृषिशाम्त्र	39
क्षेत्रकर्म, पशुधन और गान्ध, खेती के ढांचे और भूमि, वानिकी साधन,	
वास्तुकला	48
प्रारुपाकनदशयाकन तथा योजना	
खगोलशाम्त्र	54
जीवविज्ञान	55
वनस्पतिशास्त्र व्याहण-जीवज्ञान सहित	
व्यपार (वणिज)	58
सगणक, दफतरी सामान, दुकानें और सवायें सहित	
रमायनशाम्त्र	67
संचारण	70
गीत, नृत्य सहित	
अतनिन्द रवीय वणमालाये	
अभियात्रकी	80
रमायन, विद्युत, यात्रिक	
लोकजन	86
रुविद्या, फलित-ज्योतिष, होबो	
Hobo चिह्न	
भूगोल	92
भूगर्भशास्त्र	96
सामान का प्रयोग-प्रबन्ध	98
गाहस्थयविज्ञान	100
उपकारणा सहित	
निर्माण	104
भारी उद्योग की मशीन सहित	
गणित	111
चिकित्साशास्त्र	113
सामान चिकित्सालय सहित	
पटनविज्ञान	120
संगीत	123
भाषाविज्ञान	126
भौतिकशास्त्र	128
मनोरजन	130
ओलिम्पिक्स सहित	
धर्म	138
सुरक्षा	140
यातायात	143
सड़क, हवा, समुद्रीय, मयान	
यान-नियन्त्रण	157
त्रि-विमा आकार सहित	
रेखाचित्र	166
वर्ण	231
अभिस्वीकृति	248
ग्रंथसूची	252
अनुकर्मणका	268

ITALIAN

PREFAZIONE— R. Buckminster Fuller	14
INTRODUZIONE	16
SEMANTOGRAFIA— C. K. Bliss	22
ISOTYPE— Marie Neurath	24
SIMBOLI PRINCIPALI	26
DISCIPLINE	
Alloggi e viaggi	34
compresi terminali	
Agricoltura	39
Agronomia, Bestiame e Prodotti Caseari, Edifici Agricoli e Terreno, Silvicultura, Attrezzi	
Architettura	48
Disegno, Progettazione Giardini e Pianificazione	
Astronomia	54
Biologia	55
comprese Botanica, Biologia Molecolare	
Affari e Commercio	58
compresi Calcolatori Elettronici, Attrezzature per Ufficio, Negozi e Servizi	
Chimica	67
Comunicazioni	70
compresi Movimento e Danza, Alfabeti Nongrafici	
Ingegneria	80
Chimica, Elettrica, Meccanica	
Folclore	86
Alchimia, Astrologia, Segni dei Girovaggi	
Geografia	92
Geologia	96
Maneggio Merci	98
Economia Domestica	100
compresi Elettrodomestici	
Industria	104
compreso Macchinario Pesante	
Matematica	111
Medicina	113
compresi Attrezzature, Ospedali	
Meteorologia	120
Musica	123
Fotografia	126
Fisica	128
Svaggi	130
compresi Giochi Olimpici	
Religione	138
Sicurezza	140
Circolazione	143
Stradale, Aerea, Marittima, Ferroviaria	
Controlli Veicolari	157
comprese Forme a 3 Dimensioni	
FORMA GRAFICA	166
COLORE	231
RINGRAZIAMENTI	248
BIBLIOGRAFIA	252
INDICE	268

JAPANESE

前文— R. Buckminster Fuller	14
序論	16
セマントグラフィ— C. K. Bliss	22
ISOTYPE— Marie Neurath	24
基本記号	26
部門	
旅行及び旅行施設	34
ターミナルを含む	
農業	39
農業、牧畜及び酪農製品	
農園施設及び土地、森林、用具	
建築	48
製図、都市計画及び造図、計画	
天文学	54
生物学	55
植物学、分子生物学を含む	
ビジネス	58
計算機、オフィス機器、店及びサービスを含む	
化学	67
通信	70
運動及びダンス、非グラフィック	
アルファベットを含む	
工学	80
化学、電気、機械工学を含む	
民俗学	86
錬金術、占星術、ホボ・サイン	
地理学	92
地質学	96
商品扱い	98
家庭経済	100
家庭用品を含む	
製造	104
重機械を含む	
数学	111
医学	113
器具、病院を含む	
気象学	120
音楽	123
写真	126
物理学	128
リクリエーション	130
オリンピックを含む	
宗教	138
安全	140
交通	143
道路、航空、海上、鉄道	
車輛コントロール	157
3次元形体を含む	
グラフィック・フォーム	166
色彩	231
あとがき	248
文献	252
索引	268

NORWEGIAN

FORORD—R. Buckminster Fuller	14
INNLEDNING	16
SEMANTOGRAFI—C. K. Bliss	22
ISOTYPE—Marie Neurath	24
GRUNN-SYMBOLER	26
DISIPLINER	
Losji og Reiser	34
inklusive Terminer	
Landbruk	39
Agronomi, Kreaturvesen og	
Meieri Produkter, Bondegård	
og Land, Forstvesen, Redskaper	
Arkitektur	48
Grunnrissning, Landskap og	
Planering	
Astronomi	54
Biologi	55
inklusive Botanikk, Molekyl	
Biologi	
Forretningsvesen	58
inklusive Beregnings Maskiner,	
Kontor Utstyr, Forretning og	
Tjenester	
Kjemi	67
Samband	70
inklusive Bevegelse og Dans,	
Ikkegrafiske Alfabeter	
Ingeniørvitenskap	80
Kjemisk, Elektrisk,	
Mekanisk	
Folkeminneforskning	86
Gullmakeri, Astrologi,	
Tater Tegn	
Geografi	92
Geologi	96
Handtering av gods	98
Hjem Økonomi	100
inklusive Innretninger	
Fabrikasjon	104
inklusive Tungt-Maskineri	
Matematikk	111
Medisin	113
inklusive Utstyr,	
Sykehus	
Meteorologi	120
Musikk	123
Fotografi	126
Fysikk	128
Rekreasjon	130
inklusive de Olympiske Lekene	
Religion	138
Sikkerhet	140
Trafikk	143
Veg, Luftfart, Marine,	
Jernbane	
Kontroll av Kjøretøi	157
inklusive Tredimensjonale	
Former	
GRAFISK FORMAT	166
FARGE	231
ANNERKJENNELSER	248
BIBLIOGRAFI	252
INDEKS	268

PORTUGUESE

PREFÁCIO—R. Buckminster Fuller	14
INTRODUÇÃO	16
SEMANTOGRAFIA—C. K. Bliss	22
ISOTYPE—Marie Neurath	24
SÍMBOLOS BÁSICOS	26
DISCIPLINAS	
Acomodações e Viagem	34
incluindo estações	
terminais	
Agricultura	39
Agronomia, Gado e Produtos de	
Laticínios, Estruturas Agrícolas	
e Terras, Silvicultura, Implementos	
Arquitetura	48
Desenho, Paisagem e	
Planejamento	
Astronomia	54
Biologia	55
incluindo Botânica, Biologia	
Molecular	
Negócios	58
incluindo Computadores,	
Equipamento de Escritório,	
Lojas e Serviços	
Química	67
Comunicações	70
incluindo Movimento e Dança,	
Alfabetos Não-Gráficos	
Engenharia	80
Química, Elétrica,	
Mecânica	
Folclore	86
Alquimia, Astrologia,	
Código de Vagabundos	
Geografia	92
Geologia	96
Manuseio de Mercadorias	98
Economia Doméstica	100
incluindo utensílios	
Manufatura	104
incluindo maquinária pesada	
Matemática	111
Medicina	113
incluindo equipamento,	
Hospitais	
Meteorologia	120
Música	123
Fotografia	126
Física	128
Recreação	130
incluindo esportes olímpicos	
Religião	138
Segurança	140
Tráfego	143
Rodoviário, Aéreo, Marítimo,	
Ferroviário	
Contrôles de Veículos	157
incluindo formatos	
tri-dimensionais	
FORMA GRÁFICA	166
CÔR	231
CRÉDITOS	248
BIBLIOGRAFIA	252
ÍNDICE	268

RUSSIAN

ПРЕДИСЛОВИЕ—R. Buckminster Fuller	14
ВВЕДЕНИЕ	16
СЕМАНТОГРАФИЯ—C. K. Bliss	22
ISOTYPE—Marie Neurath	24
ОСНОВНЫЕ ОБОЗНАЧЕНИЯ	26
ОТРАСЛИ	
Удобства и Путешествие	34
включая Вокзалы	
Сельское Хозяйство	39
Агрономия, Скот и Молочные Продук-	
ты, Сельскохозяйственные Сооружения	
и Земли, Лесоводство, Инвентарь	
Архитектура	48
Черчение, Пейзажное Зеленое	
Строительство и Планирование	
Астрономия	54
Биология	55
включая Ботанику, Молекулярную	
Биологию	
Коммерческая деятельность	58
включая Вычислительные Машины,	
Канторское Оборудование, Магазины	
и Обслуживание	
Химия	67
Средства Коммуникации	70
включая Движение и Танец,	
Неграфический Алфавит	
Инженерная проектировка	80
Химическая, Электрическая,	
Механическая	
Фольклор	86
Алхимия, Astrologia,	
Знаки Бродяг	
География	92
Геология	96
Товароуправление	98
Домохозяйство	100
включая Бытовые Электроприборы	
Производство	104
включая Высокомощные Машины	
Математика	111
Медицина	113
включая Аппаратуру, Госпитали	
Метеорология	120
Музыка	123
Фотография	126
Физика	128
Развлечение	130
включая Олимпийские игры	
Религия	138
Безопасность	140
Движение	143
Путевое, Воздушное, Морское,	
Железнодорожное	
Контроли движущихся предметов	157
включая Трех-Пространственные	
Формы	
ГРАФИЧЕСКИЕ ФОРМЫ	166
ЦВЕТ	231
ПОДТВЕРЖДЕНИЕ	248
БИБЛИОГРАФИЯ	252
ИНДЕКС	268

SPANISH	SWAHILI	SWEDISH
PRÓLOGO—R. Buckminster Fuller 14	UTANGULIZI—R. Buckminster Fuller 14	FÖRORD—R. Buckminster Fuller 14
INTRODUCCIÓN 16	DIBAJI 16	INLEDNING 16
SEMANTOGRAFÍA—C. K. Bliss 22	SEMANTOGRAFIA—C. K. Bliss 22	SEMANTOGRAPHI—C. K. Bliss 22
ISOTYPE—Marie Neurath 24	ISOTYPE—Marie Neurath 24	ISOTYPE—Marie Neurath 24
SÍMBOLOS BÁSICOS 26	ALAMA ZA MSINGI 26	GRUNDBETECKNINGAR 26
DISCIPLINAS	MAFUNDISHO FULANI	ÄMNESOMRÅDEN
Alojamiento y Viajes 34 inclusive Terminales	Makao na Kusafiri 34 pamoja na Vituo	Hotell och resande 34 innefattande Stationer och terminaler
Agricultura 39 Agronomía, Ganadería y Productos Lácteos, Estructuras en la Granja y Tierras, Silvicultura, Implementos Agrícolas	Ukulima 39 Utunzaji wa Ardhi ya Mashamba, Mifugo na Mapato yake, Mashamba na Majengo yake, Utunzaji wa Misit, Vyombo	Jordbruk 39 Agronomi, kreaturbesättning, och mejeriprodukter, gårdsstruktur och land, forstväsen, redskap
Arquitectura 48 Dibujo, Diseño de Alrededores y Planificación	Ujenzi 48 Uchoraji, Bustani za Mapambo na Kufikiria Mipango	Arkitektur 48 Ritning, och planering av omgivningen
Astronomía 54	Elimu ya Nyota 54	Astronomi 54
Biología 55 inclusive Botánica, Biología Molecular	Elimu ya Maisha (Bayoloji) 55 hata na Elimu ya Mimea (Botani), na Bayoloji ya Viini	Biologi 55 innefattande botanik, molekylbiologi
Comercio 58 inclusive Calculadoras Electrónicas, Equipo para Oficinas, Tiendas y Servicios	Biashara 58 hata na Makompyuta, Vyombo vya Ofisini, Maduka na Mafundi	Näringsliv 58 innefattande datorer, kontors-utrustning, butiker och services
Química 67	Elimu ya Madawa (Kemistri) 67	Kemi 67
Comunicaciones 70 inclusive Movimiento y Danza, Alfabetos No Gráficos	Upelekeano wa Habari 70 hata na Miendo na Dansi, Alfabeti zisizoandikwa	Kommunikationer 70 innefattande rörelse och dans, icke-grafiska alfabet
Ingeniería 80 Química, Eléctrica, Mecánica	Ufundi wa Uinjini 80 Wa Madawa (Kemikali), Wa Umeme (Elektrisiti), Wa Umekanika	Ingenjörskonst 80 Kemisk, Elektrisk, Mekanisk
Folklore 86 Alquimia, Astrología, Símbolos Populares de Vagabundos	Hadithi za Kale 86 Asili ya Elimu ya Dawa (Alkimia), Unajimu, Alama za Watembezi	Folkminnesforskning 86 Alkemi, astrologi, luffartecken
Geografía 92	Jiografia 92	Geografi 92
Geología 96	Jiolojia 96	Geologi 96
Manipulación de Mercaderías 98	Utunzaji wa Bidhaa 98	Behandling av varor 98
Economía Doméstica 100 inclusive Aparatos Domésticos	Elimu ya Mambo ya Nyumbani 100 hata na Zana za Nyumbani	Hushållsekonomi 100 innefattande hushållsmaskiner
Fabricación 104 inclusive Maquinaria Pesada	Uundaji 104 hata na Mashine za Kazi Nzito	Tillverkning 104 innefattande tungt maskineri
Matemáticas 111	Hesabu 111	Matematik 111
Medicina 113 inclusive Equipo, Hospitales	Dawa za Utabibu 113 hata na Mahospitali, na Zana	Medicin 113 innefattande utrustning, sjukhus
Meteorología 120	Elimu ya Utabiri wa Hali ya Hewa 120	Meteorologi 120
Música 123	Muziki 123	Musik 123
Fotografía 126	Maarifa ya Kupiga Picha (Ufotografia) 126	Fotografi 126
Física 128	Elimu ya Tabia na Nguvu za Vitu 128	Fysik 128
Recreación 130 inclusive Deportes Olímpicos	Maburudi 130 hata na Michezo ya Olympics	Rekreation 130 innefattande Olympiska grenar
Religión 138	Dini 138	Religion 138
Protección 140	Usalama 140	Säkerhet 140
Tráfico 143 Por Carretera, Aéreo, Marítimo, Ferroviario	Trafiki 143 Barabarani, Hewani, Majini, Reli	Trafik 143 Vägar, Flygtrafik, Sjöfart, Järnväg
Controles para Vehículos 157 inclusive Formas Tridimensionales	Usimamizi wa Magari 157 hata na Viumbo vyenye Pande Tatu	Fordonskontroll 157 innefattande 3-dimensionella former
CONFECCIÓN GRÁFICA 166	MPANGO WA 'GRAF' 166	GRAFISK FORM 166
COLOR 231	RANGI 231	FÄRG 231
RECONOCIMIENTOS 248	MATOLEO YA SHUKRANI 248	RÅDGIVARE 248
BIBLIOGRAFÍA 252	ORODHA YA VITABU 252	BIBLIOGRAFI 252
ÍNDICE 268	YALIYOMO 268	INDEX 268

FOREWORD

by R. Buckminster Fuller

There now looms into silent recognition a new exclusively visible language, that of roadside and street intersection signs, airport signs, and supermarket signs, etc., which accommodate the world-around motorist, air traveller and telephoner. The travellers' high speed needs of swiftly integrating solutions to traffic problem solving has induced the invention of a wide variety of new symbolic language forms. At the same time TV animation also tends to return to generalized conceptual modeling.

The fundamentally visual language which Ezra Pound esteemed in early peoples' ideography now trends to bringing communication tools back into universal use and comprehension.

No one human today has had more experience with the development of the new silent language supplement of travel and communication symbols than has had Henry Dreyfuss. For years he has been the leading product refinement designer for transportation on land, air and sea, as well as for the world's largest manufacturers of telephone, radio, automobile, farm machinery and camera. Henry Dreyfuss has evolved for those industries swiftly effective, exclusively visual, symbolic tools.

Because I know him well I know that he has been intuitively inspired in this visual communication development by a foresighted realization that graphic symbols could mean far more to humanity

than the immediate facilitation of the business of his specific industrial clients. Henry Dreyfuss has confided his awareness of the swiftly evolving world-around human predicament, but he is too modest to declare, even to himself, that he may be opening up a whole new world of exclusively visual language in which deafness would not prevent communication and comprehension of delicately nuanced meanings.

In the great overall evolutionary trending of humanity's gradual learning to produce ever more with ever less, it is implicit that the present discoveries of the electromagnetic behaviors of the brain and its local nerve system controls by mind will eventuate in telepathy's being graduated from society's assessment of it as mystical-magical phenomenon to an everyday communication facility.

Henry Dreyfuss' contribution to a new world technique of communication will catalyze a world preoccupation with its progressive evolution into a worldian language so powerfully generalized as to swiftly throw into obsolescence the almost fatally lethal trends of humanity's age-long entrapment in specializations and the limitations that specialization imposes upon human thinking. Thus humans can be liberated to use their own cosmically powerful faculties to communicate what needs to be done in local Universe, as humans are uniquely capable of doing — and uniquely advantaged to do — by the phenomenon love and the truthfully thinking mind. □

INTRODUCTION

Here is a word	in Greek	δηλητηριον
	in Japanese	毒
	in Russian	отрава
	in Hebrew	לצלח

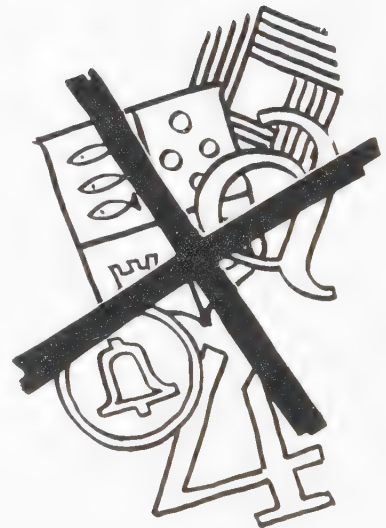


I could go on and write this word in every language in the world and literally fill several pages of this book. Yet in the interest of expediency, all I need do is substitute one simple drawing. The symbol means exactly the same as each one of these words: POISON. And it is equally intelligible whatever the language of the viewer — and perhaps even more so than the word itself. The viewer who can neither read nor write immediately recognizes the danger this symbol so graphically conveys.

My own interest in graphic symbols dates back two decades, but it is only during the past few years that we have been actively soliciting data. As a result of information pouring in daily from every corner of the world, our Data Bank now contains over 20,000 symbols. It is on this collection that our Sourcebook is based. It would be folly to assume that our files include all existing symbols, for the task of assembling so complete a record would tax both the capabilities and endurance of any man. But at least to some extent, it will serve to show the reader

what *is* — which is a first step, and will be a guide to future evaluations of what *should be* in the world of standardized, universally understandable graphic symbols.

My name on the title page is not so much to take credit as to assume the responsibility for the book's organization and content. It is titled a SOURCEBOOK to explain that it is not a dictionary, which would imply completeness. Alphabets and numbers, trademarks, emblems, all of which are already well documented, are not included. Instead, we have limited ourselves, with few exceptions, to those graphic symbols currently in use that serve to give instructions, directions, and warnings. But within this limitation the selection had to be arbitrary, for it was necessary to evaluate and weed out many symbols to avoid compounding chaos and confusion. On the page introducing the Discipline Section I have explained the parameters we followed in selection. It was indeed a monumental task.



This Sourcebook has been put together to aid all who in reading, travelling, or working come across symbols and need to define them, as well as professionals and specialists in the varied fields the Disciplines cover. Among these are students; educators; manufacturers and engineers; retailers and wholesalers; those involved in safety precautions, international shipping, and marketing; farmers and technicians; government agencies and those concerned with standards. And certainly it is planned for designers who create new symbols, in the hope that its guidance will stimulate their creativity and make them aware of what already exists so that further duplication and contradiction can be avoided.

There are today some 5,000 languages and dialects in use throughout the world, of which perhaps a hundred may be considered of major importance. In most instances, intercommunication among them ranges from difficult to impossible. One solution, of course, would be to establish an international language, and hundreds of attempts have in fact been made in the last two centuries to develop an official second language that in time could be adopted by all major countries. Esperanto, Interlingua, Ido, Volapuk – all combining elements of existing languages – and Ro and Suma, both created artificially, are but six such attempts. However, among other drawbacks, they all rely, as does basic English, on the Roman alphabet. This restricts their usefulness to those countries which utilize the Roman alphabet, and these are actually a minority among nations.

If a system of symbols could be compiled that would be equally recognizable in Lagos and Lapland, perhaps the dream of a universal basic means of communication could be realized. I believe this is possible.

In no way do I propose that this system be yet another language, for it is not really a language at all. Rather it is a supplement to *all* languages to help create a better and faster understanding in specific areas. Symbols have already evolved to the point of universal acceptance in such areas as music, mathematics, and many branches of science. A Beethoven symphony sounds the same in Japanese as it does in the original German; a column of digits adds up identically in Polish and Spanish; and a Russian scientist easily deciphers equations discussed in an English scientific journal.

Semiology, or semiotics, is the scholarly term for the science of signs indicating ideas or symbols, and *The Oxford English Dictionary* defines symbols in two ways: one as "Something that stands for, represents, or denotes something else ... esp. a material object representing ... something immaterial or abstract"

An example of this definition would be an advertisement for a deluxe automobile. The smooth, sleek lines are not only immediately recognizable as a car, but also as a symbol of one's status



among his peers — at least according to the current popular mythology. The image is enhanced by a languorous blonde in a white mink coat who becomes part and parcel of the deal.

But status symbols I will leave to others and instead turn to the other definition of symbols: “A written character or mark used to represent something; a letter, figure, or sign conventionally standing for some object, process, etc.” These are the functional, instructive graphic symbols that this book is all about. They are older than words; they are found in every culture however primitive; and in modern times they seem to be increasing almost as fast as the population itself.

In the beginning, man created the symbol — and pictures on cave walls were sufficient for a time to express his ideas about the relatively simple processes of procuring food and shelter. It was when man began to feel a need to express abstractions — differences in degree, nuances in definition, philosophical concepts — that symbols proved inflexible and inadequate. Then languages began to proliferate. It now appears that in some increasingly important areas we need an adjunct to our sophisticated speech and need to work our way back to the simple universality of an understandable, albeit limited, symbology. Symbols have multiplied to an alarming degree along much the same lines of divergence as languages. Today it is this very diversity and multiplicity of symbols in our international life that is a matter of such immediate concern. As the world grows steadily smaller, the need for easy communication becomes increasingly acute, and man has apparently come full circle — from prehistoric symbols, to sophisticated verbal communication, and now back to symbols, to help us all live together in today’s Tower of Babel.



Years ago, as an industrial designer, I tried to persuade some of our clients to substitute symbols for written captions on their products. My first success as a protagonist of semiotics was in the field of farm machinery, where we developed an entire vocabulary of symbols for vehicle and equipment operation. Our primary concern was safety. A simple, quickly comprehended form or color, or combination of both, is translated to the brain far faster and more directly than a

written word. In emergency or panic, the milliseconds saved in reaction time could save a man's fingers, his arm, his leg, even his life.

In addition to this primary human concern, there were other dividends as well. Symbols fit on small control buttons and knobs, where written instructions would be too small to be legible. Then too, manufacturers ship products all over the world, and translating various instrument identifications and instructions into the language of import countries is both expensive and time consuming. Imagine a German dealer, under the pressure of a harvest, urgently ordering 500 tractors and finding the nearest ones in Paris — with French instructions! Imagine further that in Germany, once the tractors were converted, they might occasionally have to be operated by a Swedish or Hungarian worker! Happily, symbols can cut across such language barriers.

Experts — in the manner of experts — do not agree on precise distinctions between different types of graphic symbols. But to me, it seems logical to consider them as being either representational, abstract, or arbitrary. *Representational* symbols present fairly accurate, if simplified, pictures of objects (a silhouette of a locomotive to denote a railroad crossing), or action (a man bicycling to direct one to a path reserved for cyclists). *Abstract* symbols reduce essential elements of a message to graphic terms. These may once have been representational but have become simplified by design or degrees over many years, to the point where they now exist only as symbolic indications. For example, the signs of the zodiac were once realistic representations of gods or animals, yet today they bear faint resemblance to their original concept. *Arbitrary* symbols are those that are invented, and accordingly must also be learned. The three triangle "pinwheel" directing one to a fallout shelter is a good example; also the familiar treble clef in music; and the mathematical plus and minus signs.

To make the Sourcebook a convenient reference tool we have divided it into distinct sections, and have organized the symbols in three ways:

By DISCIPLINE — a reference of symbols related to each given field of interest or application, with Subdisciplines for logical division of major groupings.



By GRAPHIC FORM — a unique compilation permitting the identification of symbols out of context, when unknown to the reader. This section also permits the designer to familiarize himself with existing uses and meanings of any given form.

By MEANING — a liberal alphabetical Index, including what we call “Design Categories,” to make it possible to readily find all symbols relating to a basic design concept. These are fully described at the beginning of the Index section.

Color produces immediate reaction and is the exclamation point of graphic symbols, so it must be reckoned with. Therefore, color is indicated on the symbols themselves throughout the book, and a separate section on the meanings of color in various cultures is also included.

The Contents for this book appears in 18 languages so that readers the world over may easily find the area in which they are doing research and thus quickly locate a specific symbol.

Men on the moon looking back at this earth from which they came have an awesome view of our opalescent spinning sphere. They are among the few to see our world in its entirety.

Many of us dream of one world, devoid of geopolitical boundaries and futile bickering. Our astronauts, alone in outer space, must sense continually the importance of all men being brothers.

In an infinitesimal way, this book is an effort to help us bring that concept into fulfillment. Communication — people to people, nation to nation — is a vital ingredient to understanding. It would be presumptuous to imply that standardized graphic symbols will result in perfect intercommunication; but perhaps this is the first faltering step to convince us that it is imperative for man to be able to communicate with any other man no matter where he may live. This need, accented by jet travel, is felt universally today. In consequence new symbols are springing up daily. But as these symbols multiply, confusion, contradiction, and duplication become rampant. Hopefully, with this Sourcebook as a start, standard symbols will some day be understood by all, regardless of language or culture.

□



SEMANTOGRAPHY

ONE WRITING FOR ONE WORLD

by Charles K. Bliss, B.Sc.

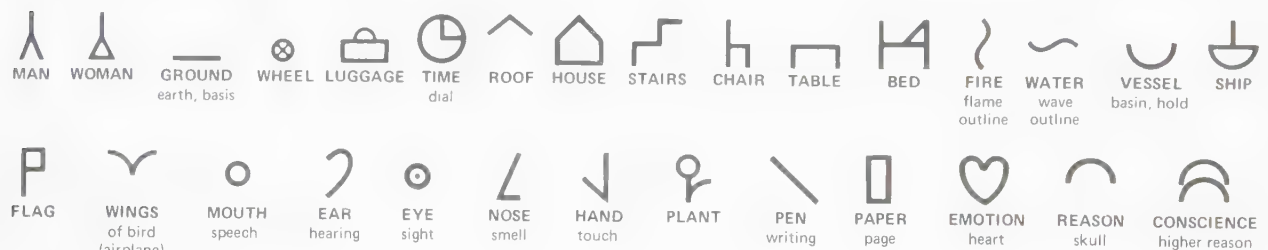
The great Leibnitz dreamed 300 years ago that someone will some day invent a Universal Symbolism, a simple system of pictorial symbols which could be read (like $1 + 2 = 3$) in all languages — without translation. It would also contain a simple symbolic logic and semantics (just as anyone can today recognize the lie in $1 + 2 = 4$). Now eminent scholars have agreed that I have done just this.

Semantography can be typed with an IBM ball typewriter, and printed by computerized typesetting. It operates with about 100 basic symbols which can be combined for any meaning needed in communication, commerce, industry and science, as proved in the 882 pages of my book (see Bibliography).

Of the 100 basic symbols the following 30 are already internationally used:



Here below are 29 basic Blissymbols

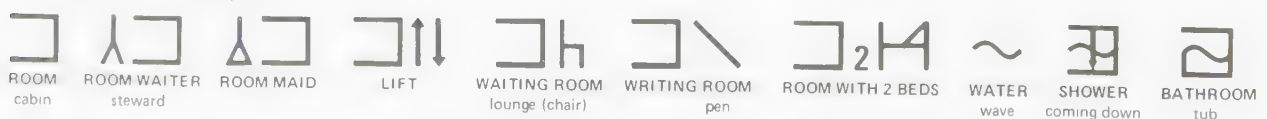


By putting a small Action indicator on top of these symbols the verbs to hear, to see, to write, to feel, to reason, etc. are formed. With this, children learned to write whole sentences within the first hour and were able to read combinations they have never seen before.

Here below are some sample combinations from my book. But first, the “line letter” for the combination of outline symbols are for instance:



For hotels, motels, etc.



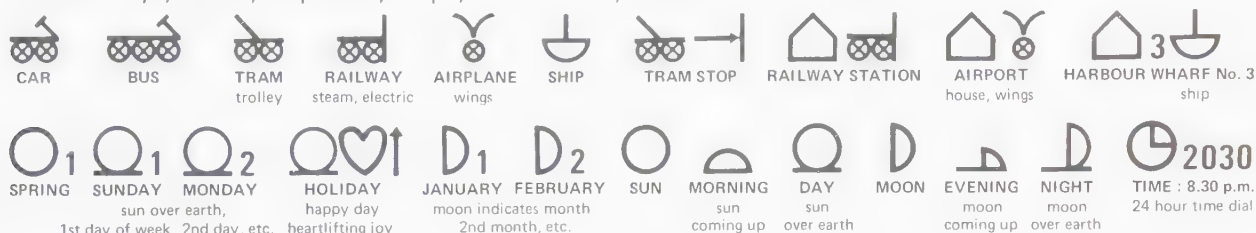
Copyright C. K. Bliss and the Semantography Trust. Reprinted by special permission.

No book related to symbols would be complete without a bow to C. K. Bliss. In "Semantography," a word conceived by his fertile imagination, he has developed a complete system which crosses all language barriers. The lines and curves of his symbols, reminiscent of actual objects and actions, are translatable into all tongues. Mr. Bliss is an intrepid pioneer; his words and ideas are proudly included in this book. HD

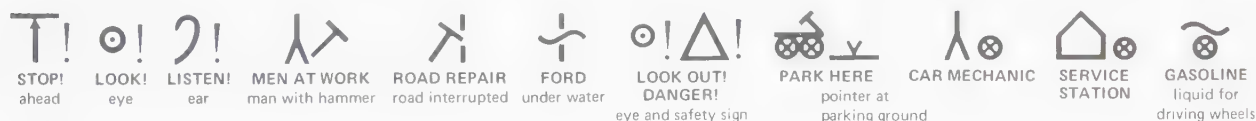
For postal communication:



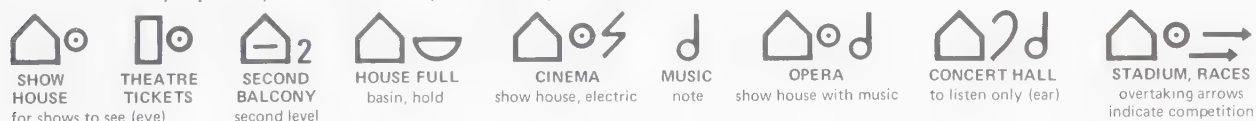
For railways, buses, airplanes, ships, time tables, etc.



For motorists:



For theatres, operas, concerthalls, cinemas, stadiums, etc.



Other symbol combinations in all fields of human endeavour, as commerce, banking, shipping, customs, menucards, shows, stores, ambulances, hospitals, as well as in all industries and in all sciences, including philosophy, religion and even poetry, are illustrated in the large chapters in my book.

But the symbols above belong only to Aspect 1 of my work. The other 5 aspects are even more fascinating. Aspect 2: a simple symbolic logic which even children can learn to use in their daily problems, and which would help them later as husbands and wives to avoid unnecessary quarrels. Aspect 3: a simple semantics which could help even children to recognize (and avoid) those dangerous words by which demagogues and dictators in the homes and nations threaten the peace of mankind.

By trying to find appropriate symbols for mankind's most important meanings like ethics, evolution, life, liberty, religion, God, etc. etc. I made some important discoveries already acknowledged by scholars. Aspect 4: a universal natural ethics encompassing all religions. Aspect 5: the biochemical discovery that cells act ethically in all creatures. Aspect 6: the archeological discovery that old stone age man was not a killer of his fellowman. Cannibalism and war began with new stone age man by the introduction of dangerous words. □

ISOTYPE

EDUCATION THROUGH THE EYE

by Marie Neurath

ISOTYPE was the original concept of Otto Neurath (1882–1945), the Austrian social scientist and teacher. His theory of education included the contention that, at least in the initial stages of acquiring new knowledge, pictures are a better means of communication than words. To translate complex figures into a form that would be both accurate and meaningful to a broad audience, he devised not only a series of refined pictographs, but also the techniques for their design and application.

He called them ISOTYPE, a name invented by borrowing the first letters from International System Of TYpographic Picture Education. Thus a large mouthful was reduced to an acceptable morsel.

Among these pictographs were ones representing different nationalities of the world, industries, and forms of communication. These pictorial “word supplements” (supplements, because they are an adjunct to any language), while being completely understandable in themselves, can assume other meanings through combination or other “grammatical” manipulations.



Men of the World



Commerce or Trade

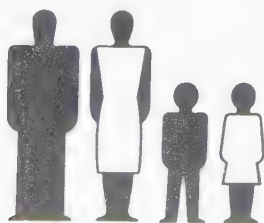


Telegram



Air Mail

The graphic point of departure for all his pictures was always what the observer actually saw, rather than the spoken or written word associated with the object or person. However, the picture had to be so refined in its execution that it immediately presented the most important fact or characteristic first, less important ones second, and details last. The ISOTYPE grammar could impart further meanings or associations, either through color, texture, or additional pictographs.



Family



Water Bottle



Wine Bottle



Spring



Summer



Fall



Winter

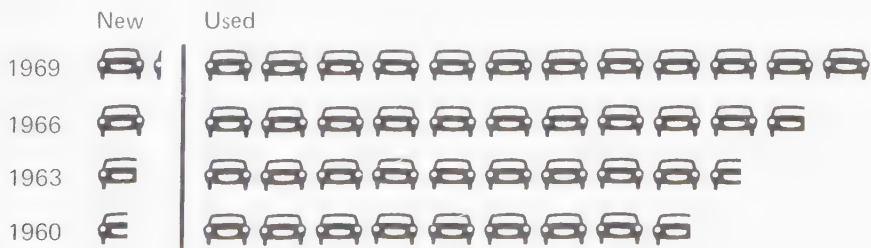
Through hardship, success, war, economic depression, and eventual recognition all over again, Otto Neurath always had his wife Marie at his side. Today this unassuming lady carries on the work they began together through the Isotype Institute Ltd. We are indebted to her for this presentation. HD

At first, while searching for the best methods to communicate, we stammered; then we spoke; then we described how we spoke. Our system has a vocabulary — the symbols; and a grammar — the rules of our method.

The following signs illustrate a few basic pictographs and their combinations.

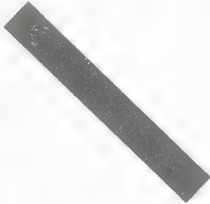
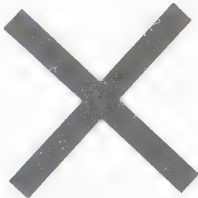
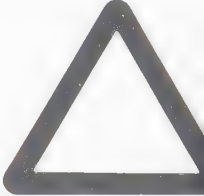
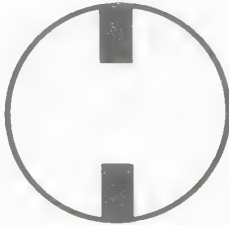
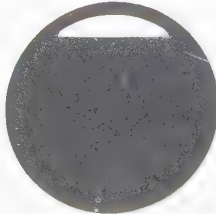
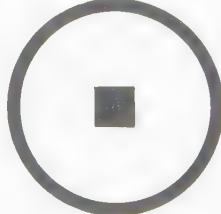
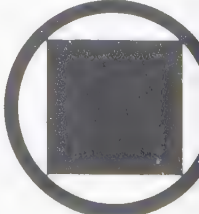


Geographers and statisticians have used visual representations in a variety of methods, employing geometric shapes in sizes proportional to represented quantities. However, I believe no one has made statistics as easy to comprehend instantly, as does the system of ISOTYPE. In the modernized example below, it is readily apparent that the facts are clearer — and more likely to be remembered — than if the reader were confronted with a complex series of numerals or graphs. In presentations of statistical material in a comparative form, this technique is widely used today in newspapers, magazines, textbooks, financial reports, and business journals.

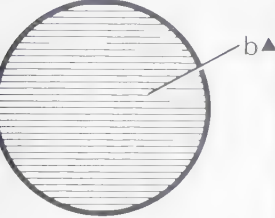
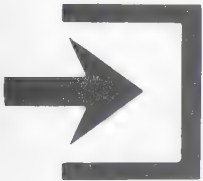
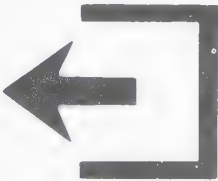
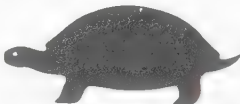
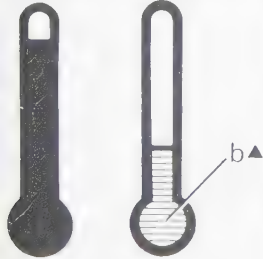
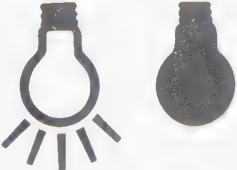


BASIC SYMBOLS

Certain symbols have become basic to semiotic communication. They appear and reappear, are consistent among disciplines, and their meaning remains constant. They reassure us in our interpretation of complex directions and are fundamental to the understanding of any symbol system. They are the foundation – the ABC's – of graphic symbols.

	OR			
PROHIBITION			RESTRICTION	WARNING
				
LEFT	RIGHT		UP	DOWN
				
ON	OFF	MALE	FEMALE	
				
EMPTY	FULL	SMALL	LARGE	

Although such symbols are not a clearly defined group like the 26 letters of the Roman alphabet, the following selection represents examples extracted from many disciplines which, in my personal judgment, can be called Basic.

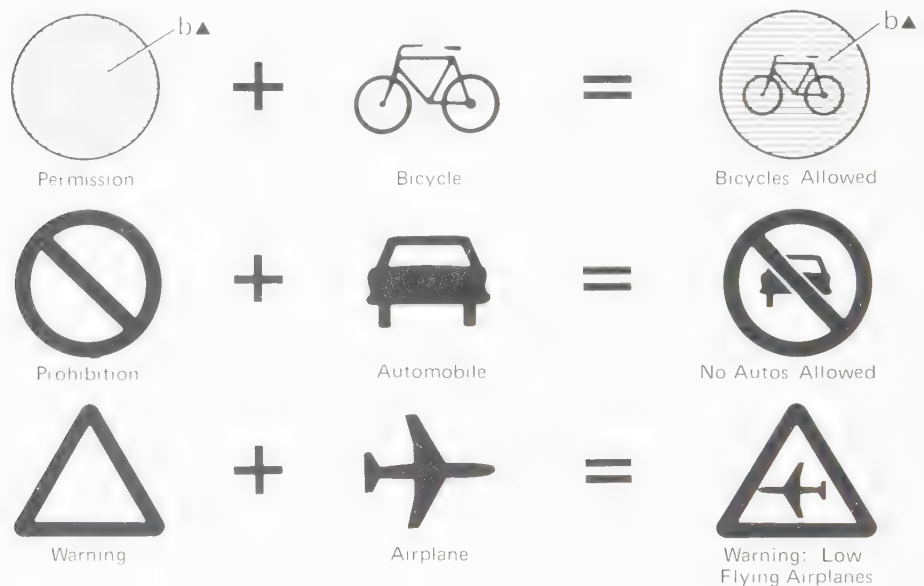
 PERMISSION	 TIME	 DIRECTION	 MOTION
 OUT	 IN	 FAST	 SLOW
 HOT ... COLD	 HEAVY ... LIGHT	 INCREASE	 DECREASE
 MEASUREMENT	 LIGHT ... DARK	 CONTINUOUSLY VARIABLE	

▲ The letter b indicates color blue.

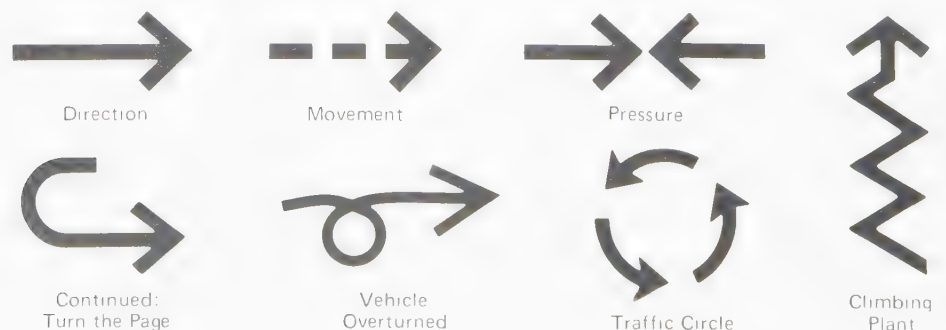
BASIC SYMBOLS *(continued)*

Basic Symbols, like the ones illustrated on the previous pages, are often combined with other symbols to develop more complex meanings and instructions. Thus a kind of *grammar* of semiotics evolves.

For instance, effective forms, reinforced by color, have been adopted by the United Nations for traffic guidance. Color is used for emphasis and instant recognition – red expressing prohibition or warning, and blue indicating permission. The meaning of the basic form is modified by what is placed within it:



The much-used arrow can be modified to give more complex directions:



▲ The letter b indicates color blue.

Progression or intensity may be shown by size in relation to a fixed element:



Radiation Level (Low to High)

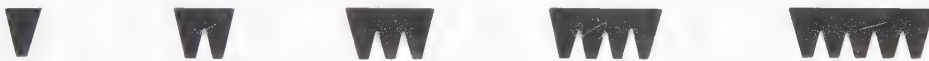


Sky Coverage (Clear to Complete Overcast)

Progression may also be indicated by multiplication of a symbol, usually shown in a predetermined pattern:

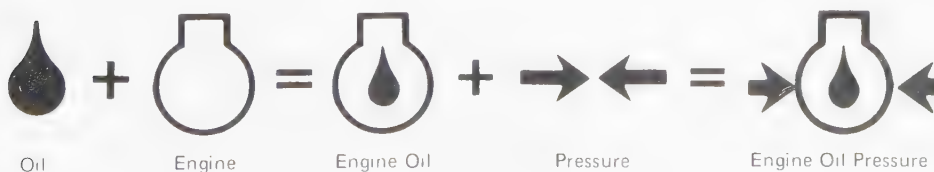


Snowfall (Slight Intermittent to Heavy Continuous)



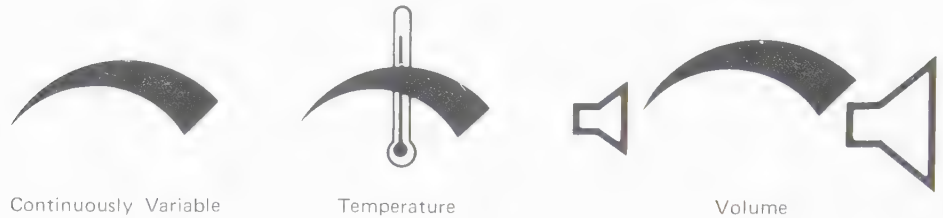
Powers of Ten (Unit to Ten-thousand)

This grammar concept is not limited to the symbols which we have selected as Basic. Some symbols have become well established in their own Discipline and are readily recognized. Thus, they can be combined to convey a clearly understandable message to anyone familiar with that Discipline:



BASIC SYMBOLS *(continued)*

Increase and Decrease can be related to a specific application by the following technique:



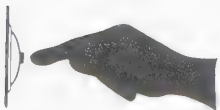
Variations can be achieved simply by adding an "adjective" element to the basic symbol:



THE SEARCH FOR PUSH AND PULL



As often happens, an elementary problem has become the most elusive to solve. It would appear easy to convey these simplest of actions: Push and Pull. But they defy obvious graphic delineation.



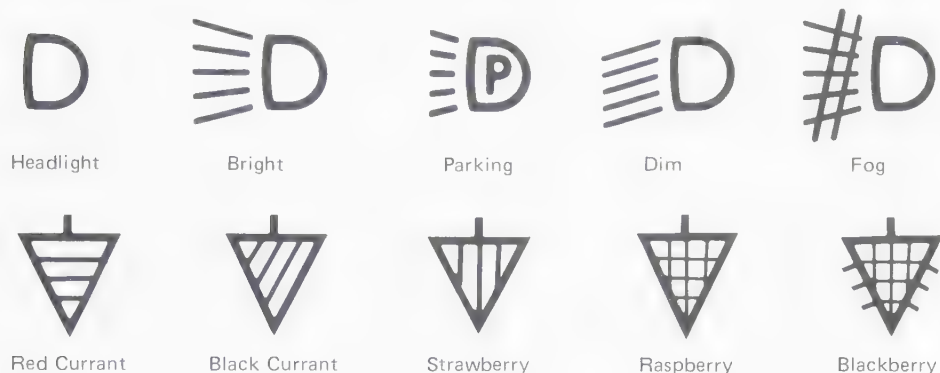
Certainly it is unfortunate that we can include no accepted symbols for these actions in our lexicon of Basic Symbols.



An internationally reprinted newspaper account of our symbol work reported our difficulty in finding satisfactory Push and Pull symbols. As a result, we received hundreds of suggestions.

Among these were a variety of drawings of hands. Although hands do indeed perform the act of pushing and pulling, these suggestions are all either closely related to STOP signs, or are limited in application or just plain confusing!

Using an established symbol, simple line changes — either in direction or length — can modify its meaning:



These few examples show the emerging grammar of symbols and what can be conveyed by the consistent combination of familiar, simple forms to create a more complex message.

Most of the suggested symbols imply a sideways motion, which is fine for a sliding door, but in an emergency such instructions on a common hinged or swinging door could prove disastrous. They would be equally misleading on a control knob requiring an in-and-out motion.

Obviously, there are limitations to pictorial symbols; many signs and instructions do not lend themselves to this type of representation. So numerous contributors sent us strictly abstract designs.

DNA (Deutscher Normenausschuss), which is developing symbol standards for ISO (International Organization for Standardization), has proposed these very interesting diagrams for Push and Pull, and an adaptation for “turn.”

Perhaps these isometric arrows would provide a solution?



DISCIPLINE SECTION

SELECTION — Frequently, several symbols exist for the same meaning. In those cases I have used my judgment in selecting one or more on the basis of clarity, common usage, or excellence of graphic presentation. But when there is only one symbol expressing a specific direction or instruction, it is included regardless of its quality. The inclusion of a symbol in no way indicates my approval.

In the strictly academic or technical Disciplines, we have enlisted the aid of experts in each field to select those symbols of maximum general interest. Most stringent editing has been used in these areas, as complete data is voluminously documented in readily available technical publications. Many of these are listed in the appropriate Discipline sections in the Bibliography, for those who require expanded information.

Initials, abbreviations, numerals, and Greek letters are included only when they are essential in the presentation of a Discipline and have an internationally accepted meaning; for example, abbreviations for chemical elements and Greek letter designations for units in physics.

EXCEPTIONS to our rule of including only two-dimensional graphic symbols have been made in special areas where no true graphic symbol exists. For example, in the Discipline of Religion, exclusion of three-dimensional symbols would have left the subject incomplete; we have therefore translated the major three-dimensional forms to simple definitive outline.

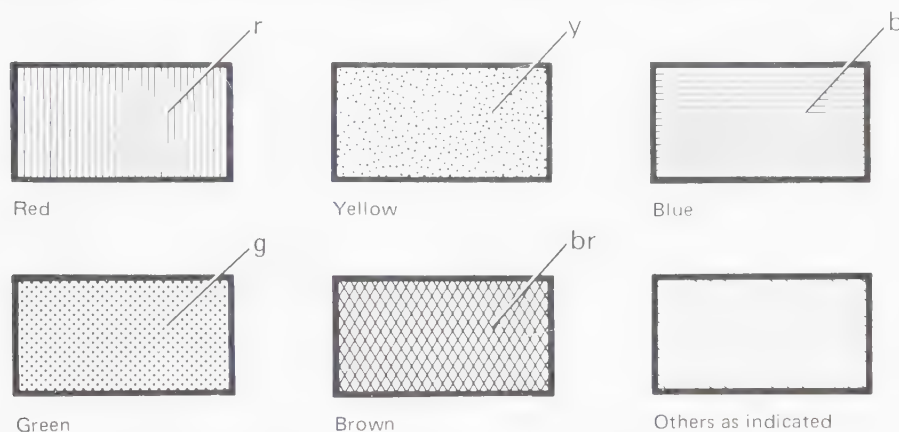
The three-dimensional shapes included in Vehicle Controls are another example of nongraphic directives serving for immediate transmission of information — adjuncts to the written word or symbol.

Light signals, as well as hand and arm signals, have been included in those few instances where they seemed essential in conjunction with or as alternates to graphic signs — such as traffic lights and semaphore codes.

GROUPING and sequencing of symbols are based, not on any academic or formal classification system, but rather according to what we considered the most logical arrangement of the material in our Data Bank.

DELINEATION — Symbols have been redrawn in order to present them with consistent delineation and with the amount of detail appropriate to the size of reproduction. Minor variations have occasionally been made to clarify the meaning. We have taken the liberty of standardizing some frequently used symbol components, such as arrows and human forms. In the case of arrows, we have also adopted a policy of using a broken line in the shaft whenever motion is to be expressed.

Color is indicated by consistent pattern codes and identifying lowercase letters as shown in the illustration below.



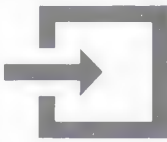
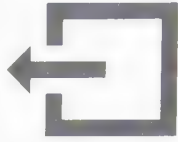
An exception to the above technique is made when a symbol has its own integral textural pattern; in such a case only a lowercase letter is used.

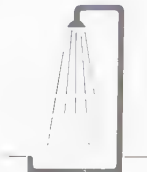
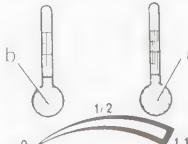
Very often the meaning of a symbol is dependent on its relationship to another graphic element. In such instances the point of reference is indicated by a light gray imprint.

ISO (International Organization for Standardization) footnote references have been made in the interest of promoting international standardization. “Recommendation” and “Draft” identification in footnotes are accurate as of the date of our publication; actual source documents are listed in the appropriate Discipline sections in the Bibliography.

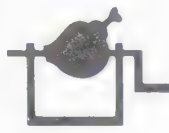
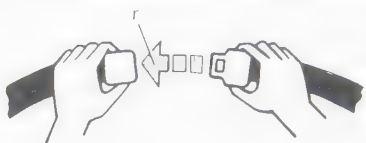
ISO is composed of national member bodies concerned with general standardization. International and national standards organizations and their relationships are described at the beginning of the Bibliography.

ACCOMMODATIONS AND TRAVEL

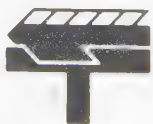
 OR 		 OR 		 OR 	
PARKING STRUCTURE		ENTRANCE		EXIT	
 OR  OR  OR 					
NO ENTRY (Keep Out)		ESCALATOR, UP		ESCALATOR, DOWN	
					
STAIRS, UP		STAIRS, DOWN		STAIRS, UP and DOWN	
					
ELEVATOR					
 OR  OR 		 OR 			
INFORMATION		RENDEZVOUS POINT		STROLLERS	
		 OR 			
LOST CHILD		NURSERY		CLOAKROOM	
					
MEN'S CLOAKROOM		WOMEN'S CLOAKROOM			
 OR 					
LOST and FOUND		SAFE DEPOSIT BOXES		DELIVERY ENTRANCE	
				Facilities	
					
				WASHROOM	
		 OR 		 OR 	
TOILETS		MEN'S TOILET		WOMEN'S TOILET	
					
				BATH and SHOWER	

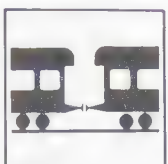
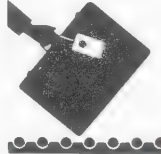
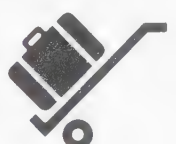
	OR		OR						OR								
BATH					SAUNA BATH			SHOWER									
								OR									
MEN'S SHOWER				WOMEN'S SHOWER		USED RAZOR BLADES	ELECTRIC RAZOR SOCKET		220 V ~		FOOT PEDAL for WATER						
						OR		OR									
SANITARY NAPKINS				NO FOREIGN OBJECTS in TOILET		TRASH				USED LINEN							
																	
USED TOWELS				USED CUPS		HOTEL RESERVATIONS		HOTEL		SINGLE ROOM		ROOM with TWIN BEDS					
																	
ROOM with DOUBLE BED				QUIET		BELLBOY		MAID		ROOM SERVICE		BARMAN					
																	
LAUNDRY				LIGHT SWITCH		VENTILATION CONTROL		HEATING CONTROL		LOCK		UNLOCK					
Food and Drink						OR				OR							
				RESTAURANT								SNACK BAR		COFFEE SHOP			

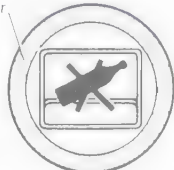
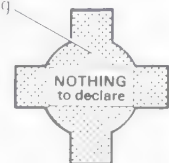
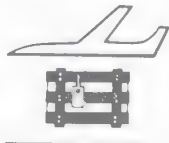
ACCOMMODATIONS AND TRAVEL *(continued)*

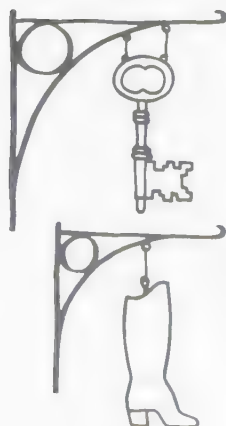
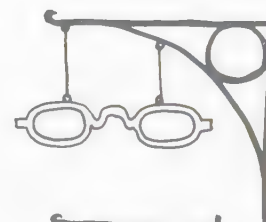
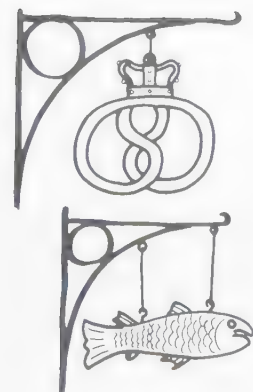
	 OR 	 OR  OR 			
GRILL	VENDING MACHINE (Automat)	BAR			
					
DRINKING FOUNTAIN	DRINKING WATER	DON'T DRINK the WATER	On-Board Aircraft	FASTEN SEAT BELTS	
 OR 					
NO SMOKING	ASHTRAY	TOILETS AFT	TOILETS OCCUPIED		
			 OR 		
READING LIGHT	STEWARDESS CALL	SEAT OCCUPIED	PLACE LUGGAGE on FLOOR	RETURN to SEAT	
					
RETURN SEAT to UPRIGHT POSITION	SICKNESS CONTAINERS	OXYGEN	FIRE EXTINGUISHER	REMOVE SHOES on Evacuation Slide	MEGAPHONE

Terminals

	 OR 			
AIRPORT	HELIPORT	SHIP	FERRY	MONORAIL

 RAILROAD STATION	 OR  TRAIN		 CAR SLEEPER TRAIN	 STREET CAR	 BUS
 LIMOUSINE	 TAXI	 CAR RENTAL (Car Hire)	 MOTORCYCLE	 BICYCLE SHED	 BICYCLE DISPATCH
 PASSENGER CHECK-IN	 TICKETS	 OR  OR  OR  BAGGAGE CHECK-IN			
 OVERSIZE LUGGAGE	 OR  OR  OR  BAGGAGE CLAIM				 CART RENTAL
 OR  PORTER		 BAGGAGE LOCKER	 BAGGAGE STORAGE (Left Luggage)	 UNCLAIMED BAGGAGE	 OBSERVATION DECK
 OR  CURRENCY EXCHANGE			 NEWSSTAND	 WAITING ROOM	 WAITING ROOM, Mothers and Children
 FLIGHT INFORMATION	 PASSENGERS ONLY	 DEPARTING FLIGHTS	 ARRIVING FLIGHTS	 CONNECTING FLIGHTS, Domestic	 CONNECTING FLIGHTS, International

 COMPARTMENT, Mothers and Children	 CLUB	 DON'T OPEN BEFORE VEHICLE STOPS	 DO NOT LITTER	 DUTY-FREE SHOP	 PUBLIC HEALTH
 OR  OR  OR  CUSTOMS				 OR  GOODS to DECLARE	
 OR  NOTHING to DECLARE		 HANGARS	 OR  AIR FREIGHT		

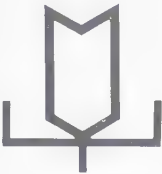


PRE-NEON

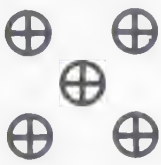
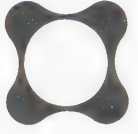
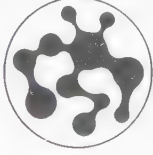
For centuries, shopkeepers and professionals the world over have displayed three-dimensional symbols on the outside of their premises.

Besides reminding regular customers of the services and merchandise offered, these indicators also informed tourists not familiar with the language, as well as local illiterates (who abounded before the last century), of what was available within.

These handcrafted symbolic sculptures are today much sought-after collectors' items. How far removed is today's excess of signs that visually pollute our streets and avenues.

					
CEREALS	SILAGE CEREALS	FORAGE CEREALS	SUMMER CEREALS	WHEAT	BARLEY
					
RYE	OATS	RICE	CORN (Maize)	SILAGE CORN	BUCKWHEAT
					
MILLET	LOOSE GRAIN	GRAIN in SACK	SHEAF	LOOSE STRAW	BALED STRAW
	OR 				
CHAFF		FLOUR	LOOSE HAY	BALED HAY	CRUSHED GRAIN
					
SILAGE	PULP	COTTON	FLAX	HEMP	SUNFLOWERS
					
FLOWERS	POPPY	TOBACCO	RAPE	MUSTARD	MEDICINAL PLANTS
					
TEA	HOPS	COFFEE	SUGAR BEET	DRIED SUGAR BEET PULP	BEET TOP

					
MANGEL-WURZEL	CANE	CLOVER	ALFALFA (Lucerne)	SAINFOIN	SERRADELLA
		Fruits and Vegetables			
WEED	GRASSES			VEGETABLES	POTATO
					
CHITTED POTATOES	JERUSALEM ARTICHOKE	RUTABAGA	TURNIP	LEGUMES	BEAN
					
SOYBEAN	BROAD BEAN	LENTIL	VETCH	LUPINE	PEA
					
PEANUT	STANDARD	HALF STANDARD	BUSH	BUSH, spindle tree	FRUIT
					
CITRUS FRUIT	APPLE	PEAR	QUINCE	PEACH	APRICOT
					
PLUM	CHERRY	OLIVE	GRAPE VINE	VINEYARD	GOOSEBERRY

					
RED CURRANT	BLACK CURRANT	STRAWBERRY	RASPBERRY	BLACKBERRY	
Fertilizers and Poisons					
	CONCENTRATED FEEDING-STUFFS	MANURE	LIQUID MANURE	DUNG, URINE, and WATER MIXTURE	LOOSE FERTILIZER, NON- GRANULATED
					
LOOSE FERTILIZER, GRANULATED	FERTILIZER in BAGS	MATERIALS for PLANT PROTECTION	POWDER	SMALL PARTICLE	LARGE PARTICLE
					
EMULSION	SOLUBLE POWDER	POWDER MIXED with WATER	FUMIGATION	HERBICIDE	ADHESIVE to plants (with chemicals)
					
WORMICIDE	INSECTICIDE	STERILIZER	INSECTICIDE and STERILIZER		

Livestock and Dairy Products

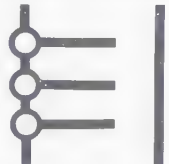
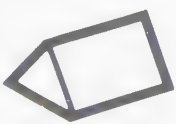
					
HORSE	STALLION	MARE	GELDING	COLT	FILLY

▲ May be combined with symbols indicating usage. Example:  indicates Powdered Insecticide,  indicates Sterilizer Emulsion.

					
DONKEY (Ass)	MULE	HINNY	CATTLE	BULL	COW
					
BULL CALF	HEIFER	FATTENED CATTLE	OX	SWINE (Pig)	BOAR
					
SOW	PIGLING	FATTENED SWINE	PORKER	SHEEP	RAM
					
EWE	LAMB	GOAT	BILLY GOAT (Male)	NANNY GOAT (Female)	KID
					
RABBIT	SILKWORM	BEE COLONY	CHEESE	MILK	SKIMMED MILK; WHEY
					
Poultry	EGGS	ALBUMEN	POULTRY	TABLE POULTRY	CHICKEN
					
ROOSTER (Cock)	HEN	CHICK	TURKEY	TURKEY GOBBLER (Tom)	TURKEY HEN

					
TURKEY CHICK	DUCK	DUCKLING	GOOSE	GOSLING	PIGEON

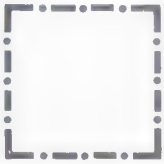
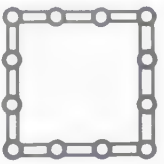
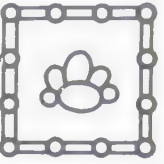
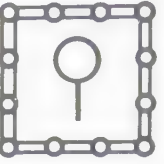
Farm Structures and Lands

					
FARMSTEAD	MASONRY BUILDING	STORY	SHED	MILK BAIL	THRESHING FLOOR, one entrance
					
MECHANICAL BARN CLEANER	TOWER SILO	PIT SILO	STACK SILO	TRENCH SILO	WINDMILL
					
FILLING STATION	DRINKING TROUGH	POND; LAKE	CISTERN	WELL	RESERVOIR
					
CLAMP	STACK	MANGER	DUNGHEAP (Midden)	MANGER PARTITION	VENTILATOR
					
CHUTE	WOODEN FENCE	CEMENT WALL	WIRE FENCE	BARBED WIRE FENCE	ELECTRIC FENCE

▲ These symbols may be combined with those from other Sub-Disciplines. Example:  indicates Pig Shed;  Repair Shop.

AGRICULTURE

Farm Structures and Lands (continued)

					
ACREAGE	PASTURE	GARDEN	VEGETABLE GARDEN	ORCHARD	FALLOW LAND
					
CELLAR	KITCHEN	QUARANTINE	METEOROLOGICAL STATION		

Forestry

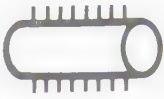
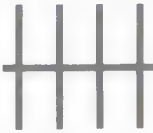
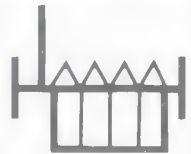
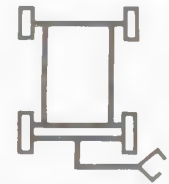
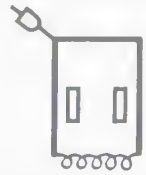
					
PINE FOREST	DECIDUOUS FOREST	BRUSHWOOD	LEAFY UNDERGROWTH	NEEDLES; WOODY UNDERGROWTH	COPSE (Coppice)
					
NORWAY SPRUCE	LARCH	SCOTCH PINE	EUROPEAN SILVER FIR	OAK	BEECH
					
BIRCH	RESERVE	REGENERATION	THICKET	POLEWOOD	MATURE FOREST
					
REGENERATION HUSBANDRY	SOIL CULTIVATION	TO SEED	TO PLANT	REPAIR PLANTING	CLEAR FELLING

					
CLEARING in YOUNG STAND	THINNING	TIMBER	FIREWOOD		

Implements *

					
FORK	RAKE	SPADE; SHOVEL	HOE	SCYTHE	HATCHET; AXE
					
SCISSORS	DIBBLE	HANDTOOLS	SAW	CIRCULAR SAW	LADDER
					
RACK	PLOWSHARE	DISC	RAKE TINE	CULTIVATOR TINE	SUBSOILER
					
BEET LIFTING SHARE	POTATO DIGGING SHARE	DIGGING REEL	DISC DRILL COLTER	DRILL COLTER	KNOTTER
					
METAL WHEEL	PNEUMATIC TIRED WHEEL	CAGE WHEEL	MACHINE	DRAWBAR	RUT LOOSENER

* FOR MECHANIZED FARM EQUIPMENT, SEE VEHICLE CONTROLS: Agriculture, PAGE 160

					
HARROW	CHAIN HARROW, SPIKED	CHAIN HARROW, WEEDER	FLOAT	FLAT ROLLER	PICK-UP ATTACHMENT
					
CORN PICKER	SCOOP for FRONT LOADER	FORK for FRONT LOADER	CRUMBROLL	FURROW PRESS	ROTARY HOE
					
SWING PLOW	PLOW	TRAILER PLOW, one furrow	POTATO PLOW	CULTIVATOR	HAY RAKE
					
MOWER	BINDER	WINDROWER	POTATO SPINNER	TRACTOR	REAR LOADER
					
SELF-EMPTYING WAGON	DUNG SPREADER	MOBILE ELEVATOR	MOVEABLE MANURE CRANE	GRAB HOIST	BALANCE
					
HARNESS	SEAT	POWER LIFT	POWER TAKE-OFF	GRINDSTONE	CLEANER
					
THRESHING DRUM	BALER	CRUSHING MILL	CHOPPER	ROOT CUTTER	PULPER; MIXER

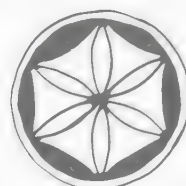
 CENTRIFUGAL FERTILIZER	 SPRAYER	 SPRAYER	 SPRAYER	 ATOMIZER	 DUSTER
 MILKING MACHINE	 BUTTER CHURN	 CREAM SEPARATOR	 INCUBATOR		



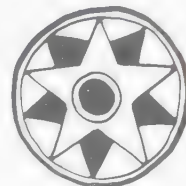
Justice



Against Lightning



Fertility



Sunshine

HEX

For centuries, though with little evidence of effectiveness, hex signs have been painted on barns to ward off trouble or attract good luck.

In the 17th century the faithful Amish and Mennonites brought the superstition from the Rhineland to the Pennsylvania Dutch countryside – and from there it spread to other parts of the country.

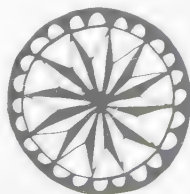
Magical powers have been claimed for these insignia of witchcraft. They are said to cause crops to grow, make the sun shine, bring on wet weather, summon fertility, or ward off cow fever.

Hex symbols can assume many forms, but most often appear as a star within a circle. In the Pennsylvania Dutch dialect they are referred to as "Schtanna," which means star, and each design variation indicates its own special meaning.

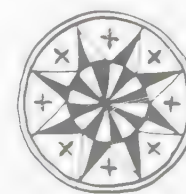
Even in this enlightened age farmers continue to enlist the services of the hex, though some admittedly use them for decoration rather than protection.



Rain



Wisdom



Good Luck



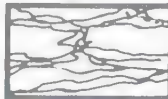
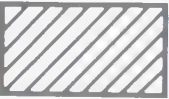
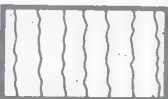
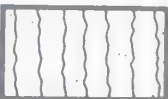
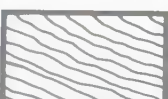
Against Demons

					
CENTER LINE		DIMENSION LINE	SHORT BREAK LINE	LONG BREAK LINE	PHANTOM LINE
					
EXTENSION LINE	HIDDEN LINE	OUTLINE	CUTTING PLANE	SECTIONING	
Electrical					
	SIGN OUTLET ONLY	FLUSH FLOOR SIGN OUTLET	BRACKET LIGHT SIGN OUTLET	SPECIAL SIGN OUTLET, as noted	ELECTRIC SIGN DISPLAY
					
DIRECTION SIGN, Non-illuminated	ELECTRIC SIGN, DIRECTIONAL	ILLUMINATED EXIT SIGN	PAINTED SIGN	UTILITY SIGN	STENCILED SIGN
					
PORCELAIN SIGN (Enamel), attached	PORTABLE SIGN	BARRICADE SIGN	DIRECTIONAL SIGN, wall or ceiling	MOVEABLE TRAFFIC CONE	DIRECTIONAL TRAFFIC CONE
					
ELECTRIC TRAFFIC CONE	TRAFFIC LIGHT	STATIONARY BOLLARD	SINGLE OUTLET	SINGLE OUTLET, FLOOR	SINGLE OUTLET, SPECIAL PURPOSE
					
DUPLEX OUTLET	DUPLEX OUTLET, SPLIT WIRED	DUPLEX OUTLET, SPECIAL PURPOSE	RANGE OUTLET	CLOCK HANGER OUTLET	THERMOSTAT

- ▲ Subscripts are added to indicate a specific type of outlet; G (Grounded), R (Recessed), WP (Weather Proof), VT (Vapor Tight), RT (Rain Tight), DT (Dust Tight), EP (Explosion Proof). Example: $\ominus_G$ means Grounded Single Outlet.
- Floor outlets are indicated by enclosing symbol in a square, as shown in Single Outlet, Floor.
- * FOR SIGNS USED IN OR ON STRUCTURES, SEE INDEX: Building Signage.

ELECTRIC EYE (Beam Source)	FLOOR OUTLET, Public Telephone	FLOOR OUTLET, Private Telephone	SYSTEM DEVICES, Public Telephone	SYSTEM DEVICES, Private Telephone	SYSTEM DEVICES, NURSE CALL
		OR			
SYSTEM DEVICES, PAGING	SYSTEM DEVICES, FIRE ALARM			SIREN	SYSTEM DEVICES, STAFF REGISTER
SYSTEM DEVICES, Watchman	SOUND SYSTEM	POLE, Electric Distribution	STREET LIGHT, Underground Circuit	STREET LIGHT and BRACKET	ELECTRICITY METER
TRANSFORMER	LIGHT OUTLET CEILING	LIGHT OUTLET, WALL	OUTLET, Surface Fluorescent Fixture	OUTLET, Bare-lamp Fluorescent Strip	FLOODLIGHT
FLOODLIGHT, SPECIAL	SPOTLIGHT, REFLECTOR	SPOTLIGHT, SEALED-BEAM	SPOTLIGHT, LENS	SPOTLIGHT, FRESNEL	SPOTLIGHT, PROFILE
			Plumbing		
SPOTLIGHT, BIFOCAL	SOFTLIGHT	EFFECTS PROJECTOR	Plumbing		BATH
	OR			OR	
SHOWER HEAD		URINAL	WATER CLOSET		BIDET

▲ Initials may be placed within the circle to indicate a special type of lighting outlet; e.g., R (Recessed Incandescent), X (Surface Exit), B (Blanked Outlet), J (Junction Box), L (Low Voltage Relay), XR (Recessed Exit).

					
WATER HEATER	METER	RANGE	DRINKING FOUNTAIN	WATER CISTERN	HOSE BIBB
Materials					
	EARTH	ROCK	NATURAL RUBBLE	RUBBLE	NATURAL ASHLAR
					
	ASHLAR, CAST or NATURAL	CAST STONE	MARBLE	SLATE	BRICK
					
	FACE BRICK	FIRE BRICK	BRICK-COTTA	TERRA COTTA	TERRA COTTA, UNGLAZED
					
	TERRA COTTA, GLAZED FACE	TERRA COTTA, GLAZED FACE	TERRA COTTA, GLAZED FACE	TERRA COTTA, GLAZED FACE	TERRA COTTA, GLAZED FACE
					
TERRA COTTA, ARCHITECTURAL	TILE, Encaustic, Faience, or Ceramic	TILE, Small Scale	STONE CONCRETE	CINDER CONCRETE	CONCRETE BLOCK
					
TERRAZZO	FINISH WOOD, END GRAIN	FINISHED WOOD with GRAIN	WOOD, Large Pieces	ROUGH WOOD	GLASS
					
GLASS, Small Scale	GLASS, Large Scale	SAND, PLASTER, or CEMENT FINISH	GYPSUM	INSULATION, LOOSE	INSULATION, SOLID

▲ Different initials indicate different equipment; e. g., DU (Dental Unit), HWT (Hot Water Tank).

● Different initials indicate different equipment; e. g., B (Bath), L (Lavatory), S (Sink), W (Water Storage Tank), DW (Dishwasher), LT (Laundry Tray).

★ DF may be replaced by FD to indicate Drain

■ HB may be replaced by G to indicate Gas Outlet

◆ Used in elevation drawings. All other Materials symbols shown are used in plan or section drawings.

◆ Used both in elevation drawings, and in plan or section drawings

CORK (Linoleum)	METAL	METAL, Large Scale	SHINGLES; SIDING		

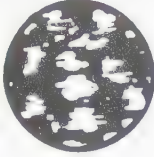
Landscaping and Planning

PAVED AREA	GRASSED AREA	PLANTED AREA	NEW TREES	EXISTING TREES	EXISTING TREES REMOVED
TREE	SHRUB	HILL	MOUNTAIN	VALLEY	BODY of WATER
RUNNING WATER	FOUNTAIN	BELOW EYE LEVEL, Right	ABOVE EYE LEVEL, Left	FENCE	RAILING
UNDERPASS	BUILDING, HIGH	BUILDING, MEDIUM	BUILDING, LOW	GROUP of BUILDINGS	TOWER
HUMAN	BICYCLE	CAR	TRAIN	RANGE	USE

- ▲ Used in elevation drawings. All other Materials symbols shown are used in plan or section drawings.
- Basic element of the "HAMS" Code (Humanity, Artifacts, Mood, Space).

					
BEHAVIOR	RELATIONSHIPS	POINT of REFERENCE	PANORAMA	VISTA	GLIMPSE
					
FACING DIRECTION	SERIAL VISION SEQUENCE		PEDESTRIAN ACCESS	ESSENTIAL SIGHT LINE	LINKED SPACE
					
CONTINUITY between 2 points	NARROWS	GROWTH	NOISY AREA	QUIET AREA	LOCATION
					
ENTRANCE LOCATIONS	ENTRANCE SHAPE	OPEN to STREET	CEILING HEIGHTS	SHORT CORRIDORS	ELEVATOR RAMP
					
LOCKED and UNLOCKED ZONES	OUTDOOR SEATS	STAIR SEATS	ACCESSIBLE BATHROOMS	RADIO or TV STATION	ACTIVITY POCKETS
					
WAITING DIVERSIONS	SLEEPING O.K.	CORE SERVICE ADJACENCIES	SMALL SERVICES without RED TAPE	SELF-SERVICE	CIRCULATION in SERVICES, vertical
					
WINDOWS OVERLOOKING LIFE	CHILD-CARE POSITION	CHILD-CARE CONTENTS	EXPANSION	PEDESTRIAN DENSITY	SIZE BASED on POPULATION

▲ Basic element of the "HAMS" Code (Humanity, Artifacts, Mood, Space).

					
POOLS of LIGHT	ARENA ENCLOSURE	ALL SERVICES OFF ARENA	ARENA THOROUGHFARE	DISH-SHAPED ARENA	ARENA DIAMETER
					
ARENA STORAGE	BUILDING Stepped Back from Arena	COMMUNITY WALL	TOWN MEETING	COMMUNITY TERRITORY	COMMUNITY PRO-JECTS TWO-SIDED
					
OFFICE FLEXIBILITY	MEETING ROOMS CLUSTERED	SEATS OUTSIDE MEETING ROOMS	WINDOW HEIGHT in Meeting Rooms	SECRETARY'S WORKSPACE	INFORMAL RECEPTION
					
INTERVIEW BOOTHS	SQUARE SEMINAR ROOMS	FORM-FILLING TABLES	STAFF LOUNGE	SMALL TARGET AREAS	STREET NICHES

PEACE

Controversy surrounds the origin of the ubiquitous peace symbol. It was introduced by pacifist Lord Bertrand Russell during Easter of 1958, when he marched at Aldermaston, England, campaigning for nuclear disarmament.

The most acceptable explanation of the design relates it to the international semaphore alphabet: N (for nuclear), D (for disarmament). These superimposed signals are surrounded by a circle indicating complete, world-wide, or total. Thus, total nuclear disarmament.

So today, this distinctive mark is universally a symbol for peace.

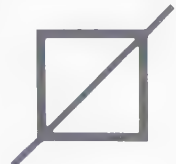
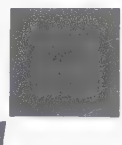
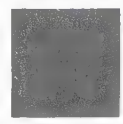


ASTRONOMY

					
SUN	NEW MOON	FIRST QUARTER MOON	FULL MOON	LAST QUARTER MOON	MERCURY
					
VENUS	EARTH; GLOBULAR CLUSTER	MARS	JUPITER	SATURN	URANUS
					
NEPTUNE	PLUTO	STAR	COMET	GALACTIC CLUSTER	PLANETARY NEBULA
					
GALAXY	CONJUNCTION	OPPOSITION	ASCENDING NODE	DESCENDING NODE	ARIES; VERNAL EQUINOX
					
TAURUS	GEMINI	CANCER	LEO	VIRGO	LIBRA; AUTUMNAL EQUINOX
					
SCORPIUS	SAGITTARIUS	CAPRICORNUS	AQUARIUS	PISCES	RIGHT ASCENSION
					
DECLINATION	ASTRONOMICAL UNIT	PROPER MOTION	ANNUAL PARALLAX	APPARENT MAGNITUDE	ABSOLUTE MAGNITUDE

Note: Stars in a constellations are designated by Greek letters assigned in order of brightness, followed by name of constellation (e.g., α Lyrae designates brightest star in constellation Lyra)

BIOLOGY

 OR 	 OR 				
MALE	FEMALE	NEUTER	NEUTER HERMAPHRODITE		
					
SEX UNKNOWN or UNSPECIFIED	DEATH, MALE	MATING	CONSANGUINEOUS MATING	MATING, MALE PROGENY	DIZYGOTIC TWINS, MALE
					
MONOZYGOTIC TWINS, MALE	PROPOSITUS (Proband)	MALE with TRAIT UNDER STUDY	AUTOSOMAL INHERITANCE	SEX-LINKED INHERITANCE	ABORTION of UNKNOWN SEX
					
PARENTAL	FIRST GENERATION OFFSPRING	MATED WITH	HYBRID	PRIMARY HOMONYM	SECONDARY HOMONYM
					
IDENTICAL WITH	LONGER THAN	SHORTER THAN	HEAD	THORAX	ABDOMEN
					
EGG	LARVA	PUPA	ADULT (Imago)	INCORRECT CITATION	DOUBTFUL CITATION
					
TYPICAL SPECIMEN	SPECIMEN VERIFIED				

- ▲ A number indicating quantity may be placed within the figure.
- Female indicated when circle (○) is used instead of square (□).
- ★ Heterozygous recessive.
- Number in subscript indicates generation. Example: F₂ would be second generation.

 OR					
STAMINATE	PISTILLATE	HERMAPHRODITE (Monoclinous)	DICLINOUS	MONOECIOUS	
					
DIOECIOUS	POLYGAMOUS	ANNUAL	BIENNIAL	PERENNIAL	EVERGREEN
					
CLIMBING	WINDING to RIGHT	WINDING to LEFT	CLIMBING PLANT	HANGING PLANT	CREEPING PLANT
					
SWAMP PLANT	WATER PLANT	PLANT with WOODY STEM	SHRUB	TREE	PLANT USEFUL to WILDLIFE
					
SPORES with MALE NUCLEI	SPORES with FEMALE NUCLEI	CYSTOCARP	TETRASPORANGIA	ACTINOMORPHIC	ZYGOMORPHIC
					
HYBRID	GRAFT HYBRID	POLYBRID; NUMEROUS	CLONE	MERGED IN	DESCRIBED WELL in this SOURCE
					
NORTHERN HEMISPHERE	SOUTHERN HEMISPHERE	OLD WORLD	NEW WORLD	SUBGENUS; SECTION	OBSCURE SPECIES

▲ A number may be substituted for dots. Example: ① for Annual, ② for Biennial

CYS (C)	CYSTEINE	ASP (D)	ASPARTIC ACID	pH	NEGATIVE LOGARITHM OF HYDROGEN ION CONCENTRATION
HIS (H)	HISTIDINE	ASN (N)	ASPARAGINE	~ P	HIGH ENERGY PHOSPHATE BOND
ILE (I)	ISOLEUCINE	GLU (E)	GLUTAMIC ACID	$\bar{v}$	PARTIAL SPECIFIC VOLUME
MET (M)	METHIONINE	GLN (Q)	GLUTAMINE	$\bar{M}_n$	NUMBER AVERAGE MOLECULAR WEIGHT
SER (S)	SERINE	LYS (K)	LYSINE	$\bar{M}_w$	WEIGHT AVERAGE MOLECULAR WEIGHT
VAL (V)	VALINE	X (X)	UNDETERMINED or ATYPICAL AMINO ACID	$\bar{M}_z$	z AVERAGE MOLECULAR WEIGHT
ALA (A)	ALANINE	RNA	RIBONUCLEIC ACID	γ	ACTIVITY COEFFICIENT
GLY (G)	GLYCINE	DNA	DEOXYRIBONUCLEIC ACID	ϵ	MOLAR EXTINCTION COEFFICIENT
LEU (L)	LEUCINE	$S^{\circ}_{20,W}$	SEDIMENTATION COEFFICIENT	$\frac{I'}{2}$	IONIC STRENGTH
PRO (P)	PROLINE	$[\alpha]_{\lambda}$	SPECIFIC ROTATION		
THR (T)	THREONINE	$[\eta]$	INTRINSIC VISCOSITY		
PHE (F)	PHENYLALANINE	Π	OSMOTIC PRESSURE		
ARG (R)	ARGININE				
TYR (Y)	TYROSINE				
TRP (W)	TRYPTOPHAN				

OUR FRAGILE CRAFT

Adlai Stevenson said, "We travel together, passengers on a little spaceship; dependent on its vulnerable reserves of air and soil; all committed for our safety to its security and peace; preserved from annihilation only by the care, the work and . . . the love we give our fragile craft."

Today the whole world is concerned with the air we breathe, the water we drink, and what is happening to the flora and fauna that still survive.

At no other time has there been so concentrated an effort to protect our birthrights. A symbol for ecology has evolved: a circle, signifying wholeness, surrounded by an ellipse, indicating unity.



Additional symbols have been proposed to spotlight specifics, and these show the dangers we must control if we are to preserve the world in which we live.



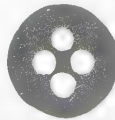
Recycling



Noise



Air



Population

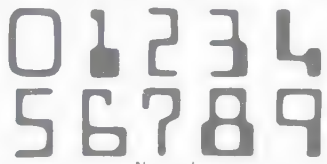


Water

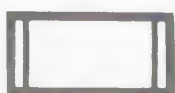


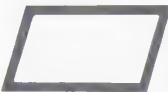
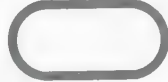
Land

BUSINESS

					
DOLLAR; ESCUDO; PESO; CRUZEIRO	PHILIPPINE PESO	CENT(S)	COLON	POUND STERLING	YEN
		 OR 			
RUPEE	PENNY	SHILLING	NUMBER; POUND	PER CENT; ORDER OF	
	    				
PER	MAGNETIC INK CHARACTERS				
					
AT; TO	PARAGRAPH	REGISTERED	COPYRIGHT	IN CARE OF; CARRIED OVER	AMPERSAND (And)
					
SECTION	DAGGER (Footnote)	DOUBLE DAGGER (Footnote)	ASTERISK (Footnote)	CONTINUED; INDEX	CONTINUED; TURN the PAGE

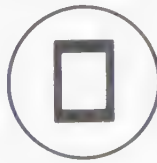
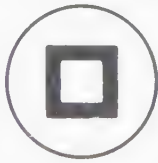
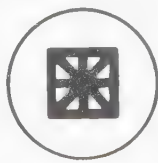
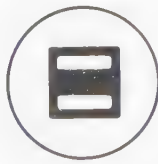
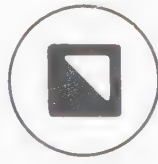
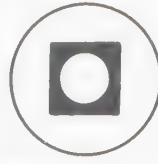
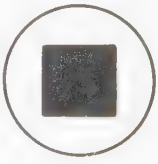
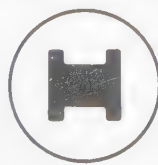
Computers

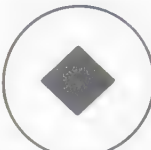
					
Programming	PROCESS	DECISION	PREPARATION	PREDEFINED PROCESS	MANUAL OPERATION

 AUXILIARY OPERATION	 MERGE	 EXTRACT	 COLLATE	 SORT	 MANUAL INPUT
 INPUT/OUTPUT	 ONLINE STORAGE	 OFFLINE STORAGE	 DOCUMENT	 PUNCHED CARD	 DECK of CARDS
 FILE of CARDS	 PUNCHED TAPE	 MAGNETIC TAPE	 MAGNETIC DRUM	 MAGNETIC DISK	 CORE MEMORY
 DISPLAY	 COMMUNICATION LINK	 ENTRANCE CONNECTOR	 EXIT CONNECTOR	 TERMINAL; INTERRUPTION	 COMMENT; ANNOTATION
Control Characters	 NULL	 FILE SEPARATOR	 GROUP SEPARATOR	 RECORD SEPARATOR	 UNIT SEPARATOR
 DATA LINK ESCAPE	 ENQUIRY	 DEVICE CONTROL 1	 DEVICE CONTROL 2	 DEVICE CONTROL 3	 DEVICE CONTROL 4
 SHIFT IN	 SHIFT OUT	 ESCAPE	 END of TRANSMISSION	 BACKSPACE	 CANCEL

CARRIAGE RETURN	VERTICAL TABULATION	HORIZONTAL TABULATION	FORM FEED	END of TRANS MISSION BLOCK	START of TEXT
SYNCHRONOUS IDLE	LINE FEED	START of HEADING	END of TEXT	ACKNOWLEDGE	NEGATIVE ACKNOWLEDGE
END of MEDIUM	BELL	SUBSTITUTE	SPACE	DELETE	
Machine Controls					
TO SWITCH ON	TO SWITCH OFF	NOT ACCEPTED	MISTAKE	PIN SHEET	
ISOLATED; ABSOLUTE	OCCUPIED: (Blocked Up)	FORWARD WAY CLEAR	BACKWARD	RETURN TRAVEL	RETURN TRAVEL
START OPERATION (Way Clear)	OVERFLOW	INPUT	OUTPUT	OUTPUT	OUTPUT
STOP	READY	MANUALLY (Key Board)	AUTOMATIC	WORD LENGTH	TRACK

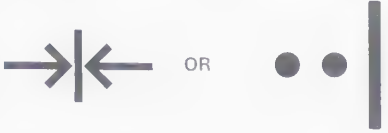
Note: Symbols are intended for use as a guide only. They are not to be used as a standard.

					
STEP by STEP	ODD; BIT; INFORMATION	EVEN	SYNCHRONOUS	COMPARISON	LINE for LINE
					
COMPLEMENTED	ADDRESS	PHASE	JUMP	SEQUENCE	CONTINUOUSLY
					
OPERATION; Active; Functioning Properly	SKIP	SYSTEM	CODE	DELETE CODE	STOP CODE
					
TO WRITE	TO READ	TO RECEIVE	TO SEARCH	TO FIND	TO MODIFY
					
TO SELECT	PROGRAM	FUNCTIONAL UNIT	CENTRAL UNIT	PERIPHERAL UNIT	COUNTER
					
COMPARATOR	FLIP-FLOP	TRANSFORMER	MAGNETIC TAPE RECORDER	MICRO-MEMORY	MEMORY
					
ARITHMETIC UNIT	MULTIPLIER	MAGNETIC DRUM	WRITING-READING DIODE	PUNCHED TAPE WRITER	PUNCHED TAPE READER

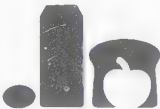
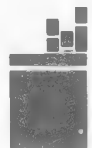
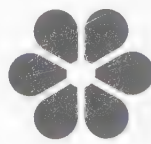
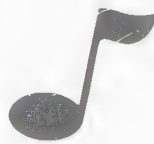
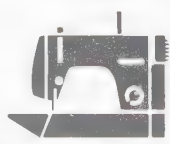
					
READER	EXTERNAL CONDITION	ACCUMULATOR (Impulse-storing)	AUXILIARY; Impulse-storing	EXTERNAL CHANNEL	INTERNAL CHANNEL
					
END of OPERATION	UNIT	TEN	HUNDRED	THOUSAND	TEN THOUSAND
					
FRAGMENT of the MAGNETIC TAPE	FRAGMENT for FRAGMENT	BEGINNING of a TAPE FRAGMENT	BEGINNING of a SEQUENCE	REPEAT	CLEAR
					
WRITING of a COMPARISON	WRITING into MEMORY MU	SYNCHRONISM in Reading Operation	SELECTION during READING	BIT THETA IS READ	SYMBOL has been FOUND
					
OPERATION with even addresses	INTERNAL CHANNEL with even addresses	ADDRESSES are the same	END of the INFORMATION	ACCUMULATOR contains a symbol	ACCUMULATOR in OPERATION
					
FUNCTIONAL UNIT READY	END of WRITING on MAGNETIC TAPE	MAGNETIC TAPE UNIT OCCUPIED	COUNTER 1 of MAG- NETIC TAPE UNIT	COUNTER for the External Channel	EXTERNAL Channel, output, bit a,b,c,d,e,f
					
OVERFLOW T	CARRIAGE RETURN of TAPE WRITER	JUMP when there is a comparison	STOP if jump due to comparison	STOP if mistake due to a jump	STOP if there is a MISTAKE

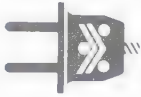
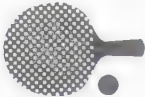
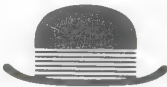
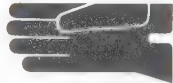
Recording and Dictating Machines	 OR 		 OR 		
	START		STOP		DICTATION
	 OR 			 OR 	
LISTEN	RECORD		PLAYBACK	REVIEW	
					
BELT LIMIT	FEED; EJECT	FEED	EJECT	SPOOL RELEASE	REMOVE
 OR  OR 				 OR 	
VOLUME			TRANSCRIBE VOLUME	TRANSCRIBE	
 OR 					
SPEED CONTROL		FOOT CONTROL	REMOTE CONTROL	FAST FORWARD MOVEMENT	FAST BACKWARD MOVEMENT
		 OR 		 OR 	
POWER	AC ADAPTER	INSTRUCTIONS to SECRETARY		END of LETTER	
 OR 					
HEADPHONE		MICROPHONE INPUT	MICROPHONE OUTPUT	MICROPHONE SOCKET	SENSITIVITY

CONFERENCE	LOUDSPEAKER	TUNING	TREBLE TONE	BASS TONE
TELEPHONE	BUZZER	SIGNAL	SINGLE INSULATION	DOUBLE INSULATION
Typewriters and Adding Machines				
ON	OFF	REVERSE	DECIMAL SIGN	
REGISTERING	NON ADD	SUBTOTAL	TOTAL	TOTAL CLEARANCE; TOTAL RELEASE
DE-JAM KEY	BACKSPACE; CARRIAGE RETURN	SHIFT LOCK	CARBON RIBBON STENCIL	FABRIC RIBBON STENCIL
TAB CLEAR	TAB SET	TYPE	NO PRINT	RIBBON FEED
RIBBON RELEASE	RIBBON REWIND	MARGIN SET	MARGIN RESET	MARGIN RELEASE

 REPOSITION INDICATOR	 SPACE EXPAND	 EXPAND	 HALF SPACE	 LINE SPACING KEY
---	---	---	--	--

Shops and Services

 BARBER	OR	 BEAUTY PARLOR	 PHARMACY		
 MARKET; GROCERY	OR	 WINE and LIQUOR	 TOBACCO	 BOOK STALL	
 PAWN SHOP	OR	 MECHANIC	 CAR WASH	 AUTOMOTIVE SERVICE	 SUNDRIES
 GIFT SHOP; SHOPPING CENTER		 FLORIST	 RECORD SHOP	 CAMERA STORE	 CANDY STORE
		 SNACK BAR			
 STATIONERY		 PATTERNS	 YARDAGE	 NOTIONS	 SEWING MACHINES
					 RAINGEAR

					
HARDWARE	ELECTRICAL SUPPLY	TELEVISION	LUGGAGE	COSMETICS	WATCHES
					
INDOOR GAMES	SILVERWARE	GLASSWARE	KITCHENWARE	BABY CLOTHES	GIRLS' CLOTHING
					
MEN'S SUITS	WOMEN'S WEAR	MEN'S WORK CLOTHES	MEN'S SWEATERS	MEN'S SHIRTS	LINGERIE
					
HOSIERY	SOCKS	LADIES' SHOES	MEN'S SHOES	HEADGEAR	GLOVES
					
STROLLER AREA	LUGGAGE LOCKER	STROLLER and LUGGAGE AREA			

SICHI



The Western world is indebted to the Medicis, that great money-lending family, for the crest from which we have borrowed the three golden balls that hang outside our pawnshops. But it took considerable digging to trace the origin of the very different pawn broker sign familiar to all Japanese.

When read in Japanese, the oriental calligraphy character indicating a pawnshop is pronounced "sichi," which also means "seven." Therefore the sign, a stylized 7, stands for pawnshop.

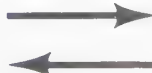
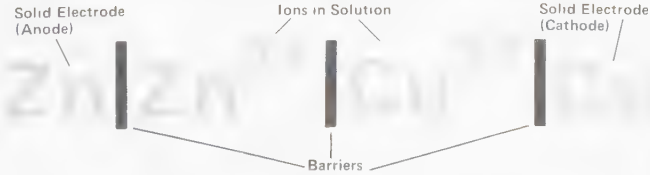
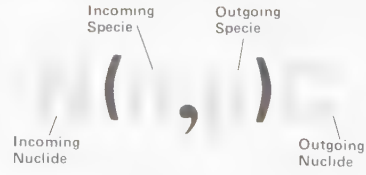
However, a Japanese friend tells me that his countrymen are embarrassed to mention a need for the sichi, so they refer to it as the "6 + 1 Bank."



CHEMISTRY

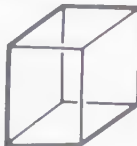
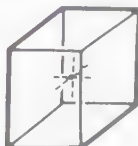
Elements

Ac ACTINIUM	Co COBALT	In INDIUM	Os OSMIUM	Sm SAMARIUM
Ag SILVER	Cr CHROMIUM	Ir IRIIDIUM	P PHOSPHORUS	Sn TIN
Al ALUMINUM	Cs CESIUM	K POTASSIUM	Pa PROTACTINIUM	Sr STRONTIUM
Am AMERICIUM	Cu COPPER	Kr KRYPTON	Pb LEAD	Ta TANTALUM
Ar ARGON	Dy DYSPROSIUM	La LANTHANUM	Pd PALLADIUM	Tb TERBIUM
As ARSENIC	Er ERBIUM	Li LITHIUM	Pm PROMETHIUM	Tc TECHNETIUM
At ASTATINE	Es EINSTEINIUM	Lu LUTETIUM	Po POLONIUM	Te TELLURIUM
Au GOLD	Eu EUROPIUM	Lr LAWRENCIUM	Pr PRASEODYMIUM	Th THORIUM
B BORON	F FLUORINE	Md MENDELEVIUM	Pt PLATINUM	Ti TITANIUM
Ba BARIUM	Fe IRON	Mg MAGNESIUM	Pu PLUTONIUM	Tl THALLIUM
Be BERYLLIUM	Fm FERMIUM	Mn MANGANESE	Ra RADIUM	Tm THULIUM
Bi BISMUTH	Fr FRANCIUM	Mo MOLYBDENUM	Rb RUBIDIUM	U URANIUM
Bk BERKELIUM	Ga GALLIUM	N NITROGEN	Re RHENIUM	V VANADIUM
Br BROMINE	Gd GADOLINIUM	Na SODIUM	Rh RHODIUM	W TUNGSTEN
C CARBON	Ge GERMANIUM	Nb NIOBIUM	Rn RADON	Xe XENON
Ca CALCIUM	H HYDROGEN	Nd NEODYMIUM	Ru RUTHENIUM	Y YTTRIUM
Cd CADMIUM	He HELIUM	Ne NEON	S SULFUR	Yb YTTERBIUM
Ce CERIUM	Hf HAFNIUM	Ni NICKEL	Sb ANTIMONY	Zn ZINC
Cf CALIFORNIUM	Hg MERCURY	No NOBELIUM	Sc SCANDIUM	Zr ZIRCONIUM
Cl CHLORINE	Ho HOLMIUM	Np NEPTUNIUM	Se SELENIUM	
Cm CURIUM	I IODINE	O OXYGEN	Si SILICON	

					
REACTION DIRECTION	REVERSIBLE REACTION	GAS EXPELLED	PRECIPITATION	APPLY HEAT	ROTATION about the BOND
		Mass Number 32 Atomic Number 16	2⁺ Ionization State 2 Atoms per Molecule	II	*
POSITIVE CHARGE	NEGATIVE CHARGE	NUCLIDE		INDICATION of DIVALENCY	ELECTRONIC EXCITED STATE
					
MOLAR CONCENTRATION	ELECTROMOTIVE CELL (Battery)			NUCLEAR REACTION	

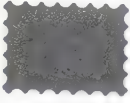
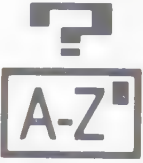
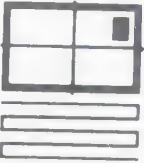
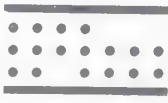
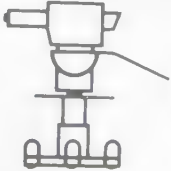
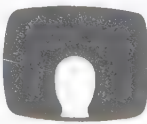
- ▲ Progression is shown by adding number to basic symbol. Example: 2⁺, 3⁺; 2⁻, 3⁻, etc.
 ● When center barrier is double (II), means Idealized Reversible Cell.

		 Bond forming Bond breaking		 Bond in plane of paper Bond toward observer Bond away from observer
COMPLEX GROUP		TRANSITION STATE		
				THREE DIMENSIONAL STRUCTURE (Methane)
SINGLE BOND	DOUBLE BOND	TRIPLE BOND	FREE RADICAL	
 OR 			 OR OR 	
RESONANCE HYBRID STRUCTURE (Benzene)			PARTIALLY POLARIZED COVALENT BOND	
UNSATURATED CARBON CHAIN		UNBRANCHED SATURATED CARBON CHAIN		
POLYATOMIC GROUP BONDING			MOLECULAR VIBRATIONS	
ATOMIC s ORBITAL	ATOMIC p ORBITAL	ATOMIC d ORBITAL	TWO ATOMIC ORBITALS FORMING SINGLE MOLECULAR ORBITAL	
	 OR 			
HYBRID s-p ATOMIC ORBITAL	MOLECULAR ORBITAL			

Crystal Structures		TRICLINIC		OR		RHOMBOHEDRAL		OR			
		DIAMOND		OR		OR		OR		OR	
		OR		OR		TETRAGONAL		OR		OR	
		OR		OR		OR		OR		OR	
	CUBIC										

Common Substances	
$\text{Al}_2(\text{SO}_4)_3$ (Aluminum Sulfide) RUBY; SAPPHIRE C (Carbon) DIAMOND $\text{C}_2\text{H}_5\text{OH}$ (Ethyl Alcohol) GRAIN ALCOHOL $\text{C}_3\text{H}_5(\text{NO}_3)_3$ (Glyceryl Trinitrate) NITRO-GLYCERINE $\text{C}_6\text{H}_2(\text{CH}_3)(\text{NO}_2)_3$ (Trinitrotoluene) TNT $\text{C}_7\text{H}_{16} + \text{C}_8\text{H}_{18}$ (Heptane and Isooctane) GASOLINE C_{10}H_8 (Naphthalene) MOTH BALLS $\text{C}_{10}\text{H}_{22} + \text{C}_{16}\text{H}_{34}$ (Decane and Hexadecane) KEROSENE $\text{C}_{12}\text{H}_{22}\text{O}_{11}$ (Sucrose) BEET SUGAR; CANE SUGAR $\text{CaCO}_3 +$ (Impure Calcium Carbonate) LIMESTONE $\text{Ca}_3(\text{PO}_4)_2 + \text{C}$ (Calcium Phosphate plus Carbon) ANIMAL CHARCOAL $\text{CaMg}_3(\text{SiO}_3)_4$ (Silicate of Calcium and Magnesium) ASBESTOS CaOCl_2 (Calcium Oxychloride) BLEACHING POWDER $\text{Ca}(\text{OH})_2$ (Calcium Hydroxide) SLAKED LIME $\text{CaSiO}_3 + \text{Na}_2\text{SiO}_3$ (Calcium- and other Silicates) COMMON GLASS	$\text{CH}_3\text{CO}_2\text{C}_6\text{H}_4\text{COOH}$ (Acetyl-Salicylic Acid) ASPIRIN $\text{CH}_3\text{COOH} +$ (Impure Acetic Acid) VINEGAR CH_3OH (Methyl Alcohol) METHANOL; WOOD ALCOHOL $\text{CH}_4 +$ (Impure Methane) NATURAL GAS CO_2 (Frozen Carbon Dioxide) DRY ICE $(\text{Fe}_2\text{O}_3)_3 \cdot \text{H}_2\text{O}$ (Hydrated Ferric Oxide) IRON RUST $\text{Fe}_4(\text{Fe}(\text{CN})_6)_3$ (Ferric Ferrocyanide) LAUNDRY BLUEING FeS_2 (Iron Disulfide) FOOL'S GOLD $\text{H}_2\text{Al}_2(\text{SiO}_4)_2 \cdot \text{H}_2\text{O}$ (Hydrated Aluminum Silicate) CLAY H_3BO_3 (Boric Acid) BORACIC ACID Hg (Mercury) QUICKSILVER N_2O (Nitrous Oxide) LAUGHING GAS NaCl (Sodium Chloride) TABLE or ROCK SALT $\text{NaHCO}_3 + \text{KHC}_4\text{H}_4\text{O}_6$ (Sodium Bicarbonate plus an Acid Salt) BAKING POWDER NaOH (Sodium Hydroxide) SOAP LYE SiO_2 (Silicon Dioxide) AGATE; FLINT; SILICA

COMMUNICATIONS

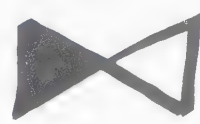
 MAILING STAMPS	 OR  OR 			 MAIL SENDING	 MAIL RECEIVING
 MONEY ORDERS	 REGISTERED MAIL	 INSURED MAIL	 PARCEL POST	 INTERNATIONAL PARCEL POST	 GENERAL DELIVERY
 WRAPPING of SMALL PACKAGES	 WRAPPING of LARGE PACKAGES	 OR  OR 			 SWITCHBOARD and SOUND
 TELEPHONE	 TELEPHONE, local	 TELEPHONE, long distance (International)	Television and Radio		 PRESS ROOM
 PRESS INTERVIEW ROOM	 GROUP ROOM		 OR 		 TELEVISION CAMERA, OFF
 SIZE, SMALL	 SIZE, LARGE	 CONTRAST, LOW		 CONTRAST, HIGH	 HEIGHT, LOW
 HEIGHT, HIGH	 TELEVISION MONITOR	 LOUDSPEAKER VOLUME		 VOLUME, LOW	 VOLUME, HIGH
 STUDIO	 MICROPHONE	 LINK PARABOLE		 FILM CAMERA	

▲ A symbol for one of the various types of mail can be combined with the "Sending Mail" or "Receiving Mail" symbols. Example:  indicates Sending Parcel Post

PROJECTOR	VIDEO TAPE RECORDER	WINDING and SPLICING TABLE	EDITING TABLE	RECORDER for PERFORATED TAPE	FILM SCANNER
TELECINE for DIAPOSITIVES	PROCESSING MACHINE	RECORD TURNTABLE	TAPE RECORDER	PORTABLE TAPE RECORDER	MIXER
				Circuit Diagrams	
CONTROL DESK	EMERGENCY POWER GENERATOR	CAR	OUTSIDE BROADCASTING UNIT		TRANSMITTER
RECEIVER	AMPLIFIER	TRANSMITTER AMPLIFIER	TRANSMITTING AERIAL	RECEIVING AERIAL	DIRECTIONAL AERIAL
RECEIVING STATION	TRANSMITTING STATION	CARRIER FREQUENCY	FREQUENCY, signalling	FREQUENCY, additional measuring	FREQUENCY BAND
SELECTIVE BAND correction in level	OVERCURRENT RELEASE	OVERVOLTAGE RELEASE	TERMINATING SET	TRANSFORMER; REPEATER	LIMITER
				OR	
MODULATOR/ DEMODULATOR	CONVERTER	SIGNAL GENERATOR	GENERATOR		SIGNAL TRANS-LATOR (Changer)

COMMUNICATIONS *(continued)*

THERMOSTAT	AUDIO-VISUAL INDICATOR	RECORDER	OSCILLOSCOPE	BREAKDOWN	
Type Composition					
	UNIT SHIFT	CENTER	LINE JUSTIFY	COLUMN JUSTIFY	LINE FILL
LINE KILL	CHARACTER KILL	CHARACTER DELETE	LETTERSPACE	LOW ALIGN	QUADDER
REPEATER	MACHINE STOP	UNIT ADD	PUNCH INHIBIT	REVERSE COUNTER	DOUBLE EXPOSE
Proofreaders Marks					
	LET IT STAND	MAKE CAPITAL		SET IN SMALL CAPITALS	SET IN ITALIC
DELETE			INSERT INDICATED MATERIAL		
TRANPOSE		CLOSE UP SPACE		INSERT SPACE	

 OR 	 OR 		 OR 		
MOVE LEFT	MOVE RIGHT		MOVE UP		
 OR 	 OR 				
MOVE DOWN	INVERT TYPE		BROKEN TYPE	START PARAGRAPH	
					
RUN IN	ALIGN TYPE	STRAIGHTEN TYPE	Color Correction Marks	INCREASE CONTRAST REDUCE CONTRAST	
					
CORRECT OUTLINE	INCREASE DETAIL	DECREASE DETAIL	MOVE	ALTER TO SIZE INDICATED	
					
CHANGE COLOR	REVERSE BLACK/WHITE	MIRROR CHANGE, LATERAL REVERSAL	EXCHANGE POSITION	IMPROVE REGISTER	ATTEND TO OBVIOUS FAULT

THE END IS NEAR

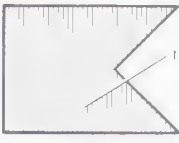
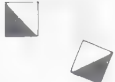
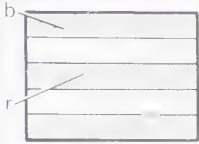
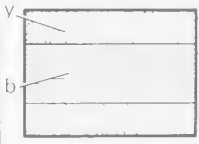
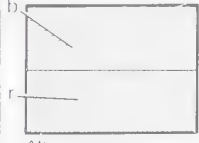
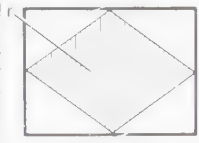
When you pick up a magazine in the dentist's office or on a train or plane, do you ever wonder whether you'll have time to finish an article or story that attracts your attention? One way to quickly match the length of time at your disposal to the length of the printed matter is to look for a symbol sometimes provided at the end of the story or article. These are some commonly used symbols:   

Other helpful symbols might show you that the article is continued on the next page.   

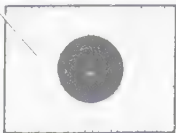
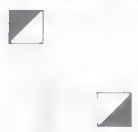
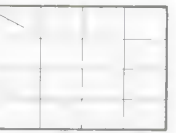
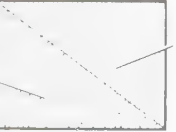
And a variation of this might direct you to a remote page where the reading matter is continued.  24 

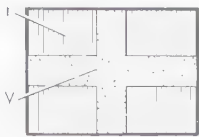
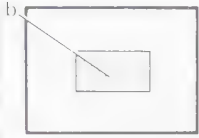
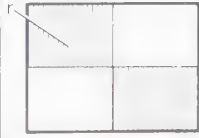
DIRECTION				LEVEL	
				LEFT SHOULDER	RIGHT SHOULDER
LEFT ELBOW	RIGHT ELBOW	LEFT WRIST	RIGHT WRIST	LEFT HAND	RIGHT HAND
LEFT FINGERS	RIGHT FINGERS	HIP	KNEE	ANKLE	FOOT
TOES	HEAD	CHEST	WAIST	PELVIS	WHOLE TORSO
TURN, Rotate Clockwise	TURN, Rotate Counterclockwise	SOMERSAULT FORWARD	SOMERSAULT BACKWARD	CARTWHEEL to LEFT	CARTWHEEL to RIGHT
CIRCULAR PATH LEFT	CIRCULAR PATH RIGHT	PRESS	PUNCH	WRING	SLASH

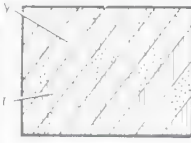
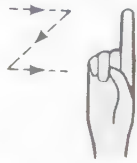
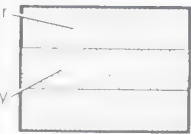
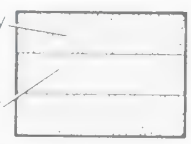
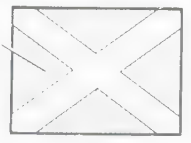
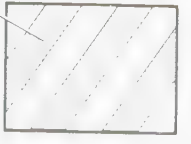
Note: "Alphabet of Basic Symbols," copyright 1954 by Rudolf Laban, reproduced by permission of Dance Notation Bureau, Inc.

	Morse Code ▲	International Flags	Semaphore	Manual (Deaf)	Braille
A	• -	 Speed trial			
B	- • • •	 Explosives			
C	- • - •	 Yes			
D	- • •	 Keep clear			
E	•	 Altering course to starboard			
F	• • - •	 Disabled			
G	- - •	 Want a pilot			
H	• • • •	 Pilot on board			

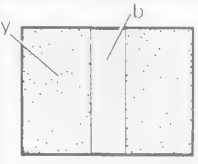
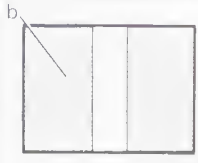
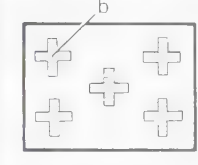
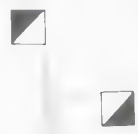
▲ Morse code may also be transmitted by "blinker" lights or by flags.

	Morse Code	International Flags	Semaphore	Manual (Deaf)	Braille
I	..	 Arriving course to port			
J	. ---	 Semaphore			
K	-- .	 Stop instantly			
L	. - . .	 Stop something to communicate			
M	--	 Doctor on board			
N	-- .	 No			
O	---	 Man overboard			
P	. --- .	 About to sail (lights out)			

	Morse Code	International Flags	Semaphore	Manual (Deaf)	Braille
Q	---.-	 Request pratique			
R	.-.-.	 Way is off my ship			
S	...-	 Going full speed astern			
T	-.-.-	 Do not pass ahead of me			
U	..--	 Standing into danger			
V	...--	 Require assistance			
W	.-.-.-	 Require medical assistance			
X	---..	 Stop your intention			

	Morse Code	International Flags	Semaphore [▲]	Manual (Deaf)	Braille [▲]
Y	— • — —	 Carrying mails			
Z	— — • •	 Shore stations			
1	• — — — —				
2	• • — — —				
3	• • • — —				
4	• • • • —				
5	• • • • •				
6	— • • • •				

[▲] In Semaphore and Braille, the first ten letters also stand for numerals. The Numeral sign ( in Semaphore,  in Braille) must precede any numeral symbol

	Morse Code	International Flags	Semaphore	Manual (Deaf)	Braille
7	---...				
8	---...				
9	-----.				
0	-----				

LEFT AND RIGHT ARE IN THE EYE OF THE BEHOLDER

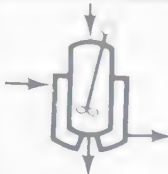
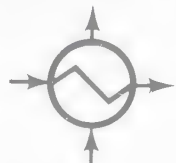
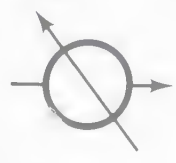
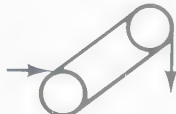
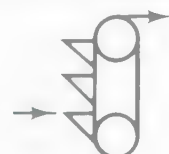
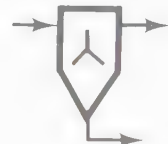
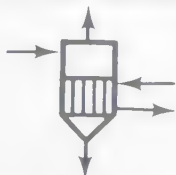
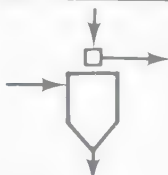
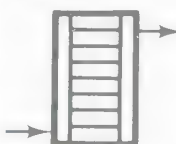
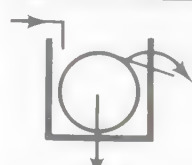
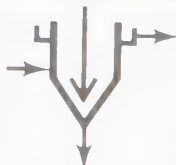
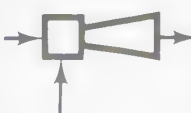
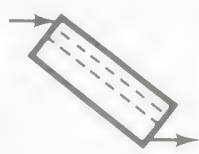
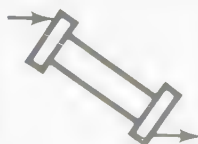
In South Africa, most of the men who work in the mines are illiterate. The miners, therefore, are given instructions and warnings in the form of symbols rather than words.

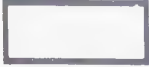
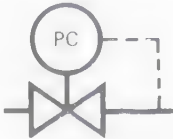
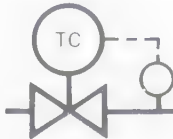
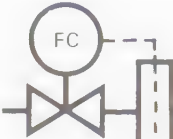
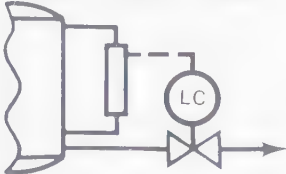
In an effort to enlist the miners' help in keeping mine tracks clear of rock, the South African Chamber of Mines posted this pictorial message:



But the campaign failed miserably. More and more rocks blocked the tracks.

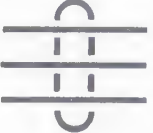
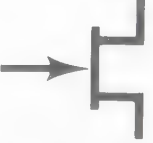
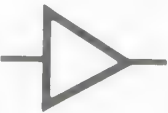
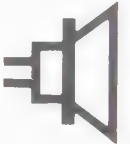
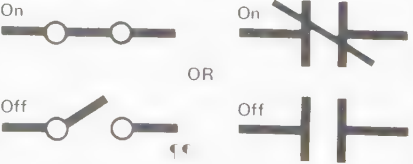
The reason was soon discovered. Miners were indeed reading the message, but from right to left. They obligingly dumped their rocks on the tracks.

					
JACKETED REACTOR, Stirred	NUCLEAR REACTOR	PACKED COLUMN	PLATE COLUMN	SECTIONED COLUMN	DISK and DONUT COLUMN
					
FIXED BED REACTOR	FLUIDIZED BED REACTOR	AUTOClave	CENTRIFUGAL PUMP	RECIPROCATING PUMP	
					
REBOILER		HEAT EXCHANGER	WATER COOLER	COOLING TOWER	SPRAY DRYER
					
BLOWER; FAN	BELT CONVEYOR; SHAKER	BUCKET CONVEYOR	SCREW FEEDER	CENTRIFUGE	CYCLONE SEPARATOR
					
SINGLE-EFFECT EVAPORATOR	BAROMETRIC CONDENSER	ELECTRICAL PRECIPITATOR	PLATE and FRAME FILTER	ROTARY VACUUM FILTER	THICKENER
					
JET MIXER; EJECTOR	MIXER	SCREENER	BALL MILL	ROLLER CRUSHER	JACKETED VESSEL
					
ROTARY DRUM DRYER; KILN	ROTARY FILM DRYER; FLAKER	PRESSURE STORAGE TANK	BULK STORAGE TANK	GAS HOLDER STORAGE TANK	GAS FLOW

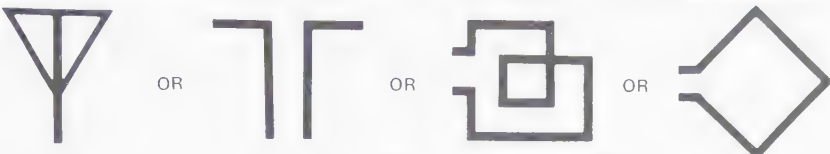
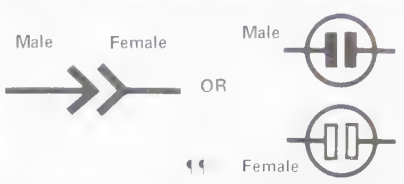
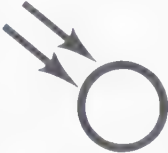
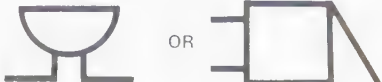
					
TEMPERATURE	PRESSURE	ALL CONTROL VALVES	PRESSURE CONTROLLER	TEMPERATURE CONTROLLER	FLOW CONTROLLER
					
LEVEL CONTROLLER	SUMMATION POINT		OPERATIONAL BLOCK		
					
TAKE-OFF POINT					

Electrical

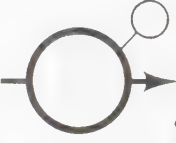
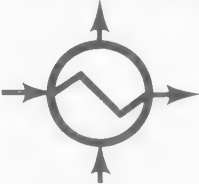
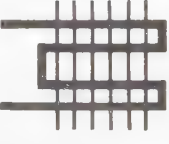
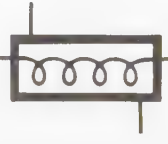
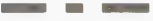
					
DIRECT CURRENT (DC)	ALTERNATING CURRENT (AC)	AUDIO FREQUENCY AC	SUPERAUDIO FREQUENCY AC	CROSSED CONDUCTORS	JOINED CONDUCTORS
					
SINGLE-PHASE	2-PHASE 3-WIRE	2-PHASE 4-WIRE	3-PHASE 3-WIRE (Delta)	3-PHASE 3-WIRE (Star)	3-PHASE 4-WIRE (Star)
					
2 and 3-PHASE TEE CONNECTED	3-PHASE, 3-WIRE VEE CONNECTED	6-PHASE; FORK with NEUTRAL	START of WINDING	VARIABLE CONTROL	VARIABLE CONTROL by STEPS

					
PRESET CONTROL	ADJUSTABLE TAPPING	PRESET TAPPING	NON-LINEAR VARIABILITY	SATURABLE PROPERTIES	EARTH (Ground)
					
CHASSIS of EQUIPMENT	INSULATED COUPLING	UNINSULATED COUPLING	SCREENED CONDUCTOR	RESISTOR	
					
NON-INDUCTIVE RESISTOR (Heater)	ADJUSTABLE CONTACT RESISTOR	INDUCTOR	TRANSFORMER	VACUUM TUBE (Triode)	DIODE
					
CONTROLLED RECTIFIER	TRANSISTOR (n-p-n type)	TRANSISTOR (p-n-p type)	TRANSISTOR, Field-effect (n-channel)	FIXED CAPACITOR	ELECTROLYTIC CAPACITOR
					
ALTERNATING CURRENT SOURCE	BATTERY (Direct Current Source)	PIEZOELECTRIC CRYSTAL UNIT	AMPLIFIER	LOUDSPEAKER	MICROPHONE
					
CATHODE RAY TUBE (TV)	LAMP BULB	INDICATOR	LIGHTNING ARRESTER	SWITCH	
					
FUSE	CIRCUIT BREAKER	RECORDING HEAD	PLAYBACK HEAD	ERASE HEAD	EQUIPMENT OUTLINE

“ Draft ISO Recommendation

 General OR Dipole OR Loop OR Loop				 Male Female OR Male Female	
AERIAL (Antenna)				CONNECTOR	
 PERMANENT MAGNET	 PHOTO-SENSITIVITY	 BELL	 BUZZER		

Mechanical *

 COMPRESSOR	 PNEUMATIC COMPRESSOR	 HYDRAULIC MOTOR	 OSCILLATING MOTOR	 HYDRAULIC PUMP	 PUMP, ROTARY and CENTRIFUGAL
 ENGINE, Gas	 BLOWER, Gas	 TURBINE	 HEAT EXCHANGER	 AIR COOLED CONDENSER	 WATER COOLED CONDENSER
 PIPE LINE JUNCTION	 CROSSED PIPE LINES	 LOW PRESSURE STEAM SUPPLY	 LOW PRESSURE STEAM RETURN	 MEDIUM PRESSURE STEAM SUPPLY	 HIGH PRESSURE STEAM SUPPLY
 PNEUMATIC FLOW DIRECTION	 HYDRAULIC FLOW DIRECTION	 WASTE WATER	 COLD WATER	 HOT WATER SUPPLY	 HOT WATER RETURN

▲ Pneumatic machinery is indicated by $\triangle$, hydraulic machinery by $\blacktriangle$

● G indicates Gas. Different initial may be substituted to indicate other type of machine; e. g. D (diesel), M (motor), T (turbine), E (steam). **Exception:** (see Engine, Gas) Steam Engine is indicated by symbol without initial.

★ C indicates Circulating Water. Different initial indicates other type of machine or service; e. g. D (concentrate), F (boiler feed), O (oil), S (service), V (air)

■ "Return" indicated by broken line, as illustrated in Low Pressure Steam Return.

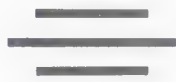
† Draft ISO Recommendation

* FOR MECHANICAL DRAWINGS, SEE ARCHITECTURE: Drafting, PAGE 48.

VENT PIPE	CHILLED WATER LINE	FUEL LINE	GAS LINE	VACUUM LINE	THREADED PIPE JOINT
FLANGED PIPE JOINT	WELDED PIPE JOINT	BELL and SPIGOT PIPE JOINT	SOLDERED PIPE JOINT	UNION, Threaded	TEE JOINT, Threaded
CROSS JOINT, Threaded	90° ELBOW, Threaded	LATERAL JOINT, Threaded	EXCENTRIC REDUCER	CONCENTRIC REDUCER	THREADED BUSHING
EXPANSION JOINT FLANGE	CHECK VALVE	SHUT-OFF VALVE; GATE VALVE	GLOBE VALVE	COCK VALVE	DIAPHRAGM VALVE
SAFETY VALVE	STOP COCK	PRESSURE GAUGE	THERMOMETER	Welding	FILLET
PLUG; SLOT	ARC-SPOT; ARC SEAM	BACKING; BACK	MELT-THROUGH	EDGE FLANGE	CORNER FLANGE
SURFACING	SQUARE GROOVE	"V" GROOVE	"U" GROOVE	"J" GROOVE	FLARE "V" GROOVE

▲ Flanged, Welded, Bell and Spigot, or Soldered Union indicated by substituting appropriate markings (see Joints). Example: Welded Union.

“ Draft ISO Recommendation

					
FLARE BEVEL GROOVE	BEVEL GROOVE	WELD ALL AROUND	FIELD WELD	FLUSH CONTOUR	CONVEX CONTOUR
Geometric Tolerances					
	STRAIGHTNESS	FLATNESS	FLATNESS and STRAIGHTNESS	CIRCULARITY (Roundness)	CYLINDRICITY
					
PROFILE of any LINE	PROFILE of any SURFACE	PARALLELISM	SQUARENESS (Perpendicularity)	ANGULARITY	POSITION
					
COAXIALITY; CONCENTRICITY	SYMMETRY	RUN-OUT	SURFACE ROUGHNESS	SURFACE to be FINISHED (Machined)	

 ISO Recommendation

EASY COME

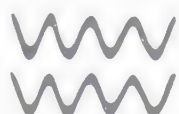
We all know where our dollars come from, although we are seldom quite sure where they go. But few of us can say where the dollar symbol itself came from.

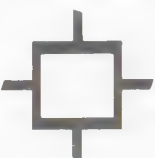
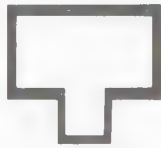
Zealous patriots erroneously speculate that it was derived by superimposing the first letter of United over the first letter of States, and that through usage over the years the bottom of the U was dropped off.

Historically, the Spaniards in the 16th century brought their peso to the New World. They had abbreviated the peso to a "P" and pluralized it by placing an S above and to its right; eventually the P was simplified to a single long stroke, and the S placed astride it. Those fancifully inclined can imagine a decorative monogram of an S for Spanish, intertwined with a P for peso.

In the 1700s, young America patterned its dollar after the peso and adopted the peso mark — but this mark somehow, and with no explanation whatsoever, now appears with a second oblique line added to its configuration.



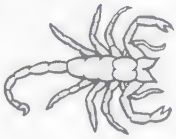
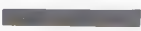
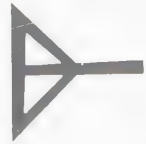
 OR  OR 			 OR 						
WATER			EARTH			FIRE			
 OR 			 OR 						
AIR			HOUR			DAY			
			 OR  OR  OR  OR 						
MONTH			CRUCIBLE						
 OR 			 OR 			 OR 			
GLASS			RETORT			POWDER			
 OR 			Elements			 OR  OR 			
SPIRITS (Alcohol)			ANTIMONY						
 OR  OR  OR 									
ARSENIC						COBALT		COPPER	
 OR  OR 						 OR  OR 			
GOLD						IRON			

 OR  OR 						
LEAD			MERCURY		NICKEL	PLATINUM
	 OR  OR 			 OR 		
SILVER		SULPHUR			TIN	
	Compounds and Mixtures		 OR  OR  OR 			
ZINC		BORAX				
 OR 		 OR 				
ALUM		CALX (Viva)		CLAY	INK	
 OR  OR  OR 			 OR 			
OIL			SAL ALKALI			
 OR  OR  OR 						
SALT			SALT, SEA		SALTPETER	
 OR 				 OR 		
SAND		SOAP	URINE	VINEGAR		

 OR 					
VITRIOL		WAX		ZINC OXIDE	
Processes	 OR  OR 			 OR 	
	DISTILLATION			DIGESTION	
		 OR 			
DISSOLUTION	FERMENTATION	FIXATION		PRECIPITATION	PURIFICATION
	 OR 				
SEPARATION	SUBLIMATION				

Astrology

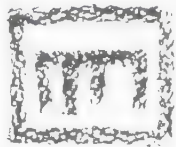
 OR 	 OR 		 OR 
ARIES	TAURUS		GEMINI
 OR 	 OR 	 OR 	
CANCER	LEO	VIRGO	

 OR 		 OR 		 OR 	
LIBRA		SCORPIO		SAGITTARIUS	
 OR 		 OR 		 OR 	
CAPRICORN		AQUARIUS		PISCES	
					
SPRING	SUMMER	AUTUMN	WINTER	SUNDAY	MONDAY
					
TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	ORIGIN; INNER-MOST ESSENCE
					
THE GODHEAD; One-ness of God	EARTH	MEETING of Celestial and Terrestrial	CROSS; GOD and EARTH combined	PASSIVE FEMALE ELEMENT	ACTIVE MALE ELEMENT
			 OR 		
CREATION	WORLD and NATURE	PASSIVE INTELLECT	ACTIVE INTELLECT		DISORDERED INTELLECT
Family Life					
	MAN	WOMAN	PROCREATION	PREGNANCY	CHILD-BEARING

					
THE FAMILY	FRIENDSHIP among MEN	MEN FIGHT	MAN DIES	WIDOW and CHILDREN	ONE CHILD DIES
					
MOTHER with ONE CHILD	MOTHER DIES	SURVIVING CHILD with SEED of LIFE			

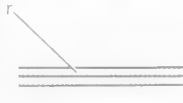
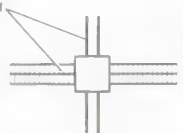
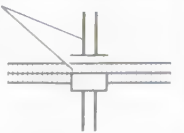
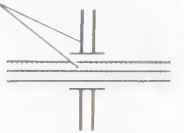
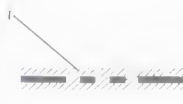
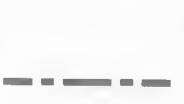
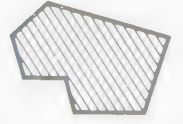
Hobo Signs

		 OR 			
NO USE GOING THIS DIRECTION	THIS WAY	HIT THE ROAD! QUICK!	GOOD ROAD to FOLLOW	ROAD SPOILED, full of other hobos	
					
DOUBTFUL	HALT	THIS IS THE PLACE	DANGEROUS NEIGHBORHOOD	THIS COMMUNITY indifferent to hobos	NOTHING to be GAINED HERE
					
YOU CAN CAMP HERE	FRESH WATER, SAFE CAMPSITE	DANGEROUS DRINKING WATER	O. K., ALL RIGHT	GOOD PLACE for a HANDOUT	ILL-TEMPERED MAN LIVES HERE
 OR 					
WELL-GUARDED HOUSE	THE OWNER IS IN	THE OWNER IS OUT	A GENTLEMAN LIVES HERE	THESE PEOPLE ARE RICH	

			 OR 		
KIND LADY LIVES HERE	KIND WOMAN, tell pitiful story		FOOD HERE if you WORK	RELIGIOUS TALK gets FREE MEAL	
				 OR 	
IF YOU ARE SICK, they'll care for you	DOCTOR HERE, WON'T CHARGE	FREE TELEPHONE	ALCOHOL IN THIS TOWN	YOU CAN SLEEP in HAYLOFT	
					
KEEP QUIET	HOLD YOUR TONGUE	BARKING DOG HERE	VICIOUS DOG HERE	BEWARE of FOUR DOGS	EASY MARK, SUCKER
					
THE SKY is the LIMIT	TROLLEY STOP	GOOD PLACE to CATCH a TRAIN	THIS IS NOT A SAFE PLACE	MAN with a GUN LIVES HERE	BE PREPARED to DEFEND YOURSELF
					
DISHONEST PERSON LIVES HERE	COWARDS, will give, to get rid of you	YOU'LL BE CURSED OUT	A BEATING AWAITS YOU HERE	POLICE HERE FROWN on HOBOS	AUTHORITIES HERE ARE ALERT
					
THERE ARE THIEVES ABOUT	CRIME COMMITTED, not safe for strangers	JUDGE LIVES HERE	COURTHOUSE; PRECINCT STATION	OFFICER of LAW LIVES HERE	JAIL

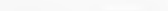
Note: Hobo signs are drawn as they usually appear – in chalk, on a rough wood fence, post or sidewalk

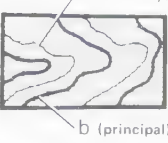
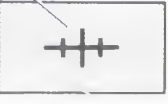
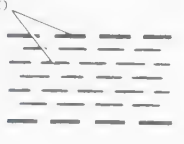
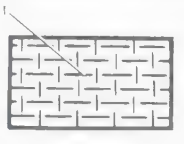
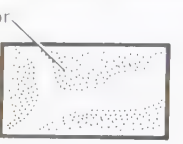
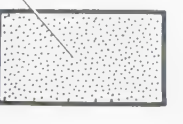
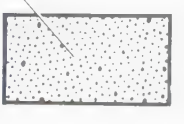
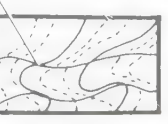
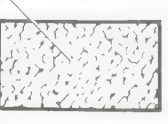
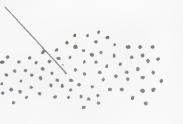
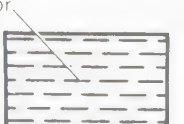
GEOGRAPHY

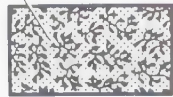
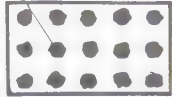
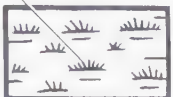
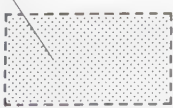
Roads and Railroads					
	SUPERHIGHWAY	SUPERHIGHWAY under construction	FULL INTERCHANGE	PARTIAL INTERCHANGE	ACCESS DENIED
					
DUAL HIGHWAY	MAIN ROAD	SECONDARY ROAD	TRACK; PATH	BRIDGE and ROAD	DRAWBRIDGE and ROAD
					
TUNNEL and ROAD	RAILROAD TRACK, single	RAILROAD TRACKS, two or more	RAILROAD STATION	NARROW GAUGE TRACK	
Boundaries					
	INTERNATIONAL	UNDEMARCATED INTERNATIONAL	UNDEFINED INTERNATIONAL	PROVINCIAL or STATE	COUNTY
					
TOWNSHIP	INCORPORATED VILLAGE	RESERVATION, national or state	LAND GRANT	SMALL PARK, CEMETERY	BOUNDARY BEACON
Settlements					
	URBAN AREA	METROPOLIS	CITY	TOWN	CITY of administrative importance
					
CITY of no administrative importance	CAPITAL CITY	NAMED TOWN within larger urban area	VILLAGE	HAMLET	VILLAGE, permanently inhabited

▲ Line may be broken or interrupted to indicate "under construction," as shown in Superhighway under Construction.

● Bridge, Drawbridge, and Tunnel shown here with Dual Highway; may also be used in combination with other road or railroad symbols

			Communica- tions		
DWELLINGS	BUILDINGS (Offices)	IMPORTANT FACTORY		TELEGRAPH ALONG ROAD	TELEGRAPH NOT ALONG ROAD
		T		P	
POWER TRANS- MISSION LINE	TELEPHONE or PIPE LINE	TELEGRAPH, TELE- PHONE OFFICE	WIRELESS TELE- GRAPH STATION	POST OFFICE	POST OFFICE with telegraph/telephone
					
SUBMARINE CABLE	TELECOMMUNI- CATIONS	INTERNATIONAL AIRPORT	AIRPORT, CIVIL or MILITARY	SMALL AIRPORT, NO FACILITIES	
Hydrographic Features					
	MASONRY or EARTH DAM	DAM with LOCK	DAM with ROAD	NAVIGABLE CANAL	CANAL with LOCK
					
NON-NAVIGABLE CANAL	LARGE NAVIGABLE RIVER	RIVER with navigable channel	LIMITS of SEA- BORNE TRAFFIC	PERENNIAL RIVER or STREAM	INTERMITTENT RIVER or STREAM
					
BRAIDED RIVER (Anastomosis)	RIVER DISTRIBUTARIES	UNSURVEYED RIVER or STREAM	LIMIT of PACK-ICE (Month)	FALLS	RAPIDS
					
DISAPPEARING STREAM	SPRING	PERENNIAL WATER	TEMPORARY WATER	ELEVATED AQUEDUCT	FRESHWATER LAKE; RESERVOIR

					
INTERMITTENT LAKE	DRY LAKE	WASH	SALT LAKE	LARGE SEAPORT	LIGHTHOUSE
					
BREAKWATER; PIER	SHORELINE	FLUCTUATING SHORELINE	ISOBATHS (Hydrographic Contours)	APPROXIMATE ISOBATHS	FORESHORE FLAT
					
ROCK or CORAL REEF	PILING (Dolphin, Buoy)	EXPOSED WRECK	SUNKEN WRECK	BARE ROCK	AWASH ROCK
					
Land Forms	INUNDATED AREA	SALT FLAT	MUD FLAT	SANDBANKS DRY at LOW TIDE	SAND DUNES
					
SAND AREA	GRAVEL BEACH	PACK-ICE	GLACIERS	DISTORTED SURFACE	STRIP MINE
					
QUARRY or SURFACE MINE	MINE TAILINGS	TAILINGS POND	RELIEF CONTOURS, principal and auxiliary	APPROXIMATE RELIEF CONTOURS	DEPRESSION CONTOURS
					
DEPRESSION FORM LINES	RIDGE; ARETE	FILL (with road)	CUT (with railroad)	LEVEE	LEVEE (with road)

Vegetation	 Woods; Brushwoods	 SCRUB	 MANGROVE	 ORCHARD	 OASIS
 VINEYARD	 SALT MARSH	 FRESH-WATER MARSH	Cultural and Natural Features	 MOUNTAIN PASS	 TRIGONOMETRICAL POINT, 1st order
 ELEVATION ABOVE SEA LEVEL	 HIGHEST POINT in COUNTRY	 RANGER STATION	 MINING PROSPECT	 ROUTE of EXPLORERS	 EXPLORER ROUTE FROM REPORTS
 POINT of INTEREST	 SCHOOL	 COLLEGE; UNIVERSITY	 MOHAMMEDAN MOSQUE	 SYNAGOGUE	 PAGODA (Temple)
 CHRISTIAN MISSION	 CATHEDRAL; CHURCH	 CEMETERY of geo- graphical importance	 LARGE HOSPITAL	 HEALTH CENTER	 RUINS
 CASTLE	 BATTLEFIELD	 MILITARY INSTALLATION	 NON-CONIFEROUS TREES	 CONIFEROUS TREES	 REDWOOD GROVES
 PARK with BOUNDARIES	 GOLF COURSE	 WINDMILL	 NATIONAL WILD- LIFE REFUGE	 TANK (Oil, Water)	

▲ Blue background would indicate submerged marsh; green background would indicate wooded marsh or swamp

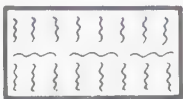
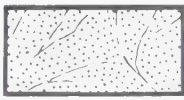
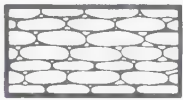
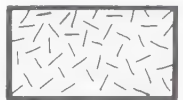
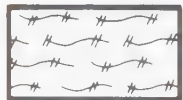
● Refers to quality of survey.

★ Also indicates 2nd Order Trigonometrical Point

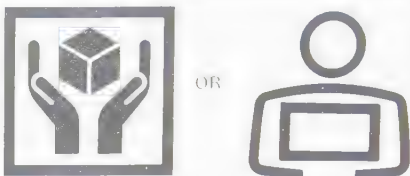
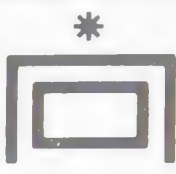
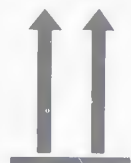
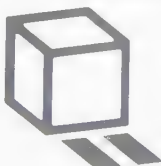
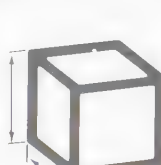
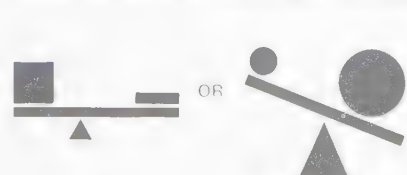
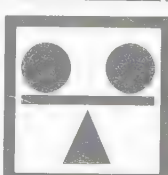
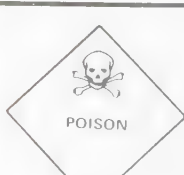
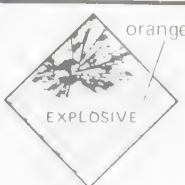
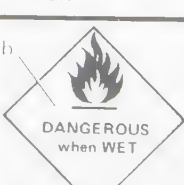
■ ▼ indicates Lowest Point in Country.

DIP and STRIKE	OVERTURNED BED	HORIZONTAL BED	VERTICAL BED	ANTICLINAL FOLD	SYNCLINAL FOLD
PLUNGING ANTICLINE	PLUNGING SYNCLINE	OVERTURNED ANTICLINE	OVERTURNED SYNCLINE	STRUCTURAL DOME	STRUCTURAL BASIN
ATTITUDE of FOLIATION	ATTITUDE of JOINT	FAULT (Down and Up Sides)	FAULT (Lateral Displacement)	THRUST FAULT	NORMAL FAULT
LANDSLIDE	VOLCANO	LAVA FLOW	ALLUVIAL FAN	SAND DUNES	OIL WELL
GAS WELL	DRY HOLE	OIL and GAS WELL	WATER WELL	MINE; QUARRY	GRAVEL PIT
PLACER MINE	MINE SHAFT	INCLINED MINE SHAFT	MINE TUNNEL	MINE DUMP	
MINE PIT, OPEN	FORAMINIFERA	CORAL	MARINE FOSSIL	BRACKISH WATER FOSSIL	FRESH-WATER FOSSIL

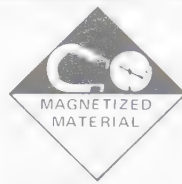
* FOR CARTOGRAPHY, SEE GEOGRAPHY, PAGE 92.

					
ALGAE	PLANT REMAINS	FISH REMAINS	FISH SCALES	GASTROPODS	VERTEBRATES
					
SOIL (Alluvium)	SAND	GRAVEL	LOESS	BRECCIA	CONGLOMERATE
					
SANDSTONE	SHALE	LIMESTONE	DOLOMITE	CHALK	COAL
					
GYPSUM	SEDIMENTARY QUARTZITE	BEDDED CHERT	GRANITE	PORPHYRY	BEDDED LAVA
		OR 			
BASALT FLOWS	MASSIVE IGNEOUS ROCK		VOLCANIC BRECCIA	VOLCANIC PYROCLASTICS	ERUPTIVE ROCK (Lava)
					
SLATE	SCHIST	CONTORTED SCHIST	GNEISS	CONTORTED GNEISS	MARBLE
					
METAMORPHIC QUARTZITE	MIGMATITE	QUARTZ	FELDSPAR	MICA	ORE DEPOSITS

HANDLING OF GOODS

					
FRAGILE				HANDLE with CARE	
					
KEEP DRY			PROTECT from HEAT	KEEP FROZEN	PROTECT against COLD
					
THIS WAY UP	SLING HERE	USE NO HOOKS	STACKING LIMIT	DO NOT STACK	INSERT LIFT CART HERE
					
LIFT HERE	PULL	OPEN HERE	DO NOT TUMBLE		
					
DO NOT ROLL	GROSS WEIGHT	NET WEIGHT	CONTENT in LITERS	DIMENSIONS	
					
TOP HEAVY	HEAVY WEIGHT THIS END		BALANCE (Center of Gravity)	POISON	
					
EXPLOSIVE	RADIOACTIVITY, Low Level	INFLAMMABLE LIQUID	INFLAMMABLE SOLID	SPONTANEOUSLY COMBUSTIBLE	DANGEROUS when WET

- ▲ This label is also made with the title Poison Gas
- Vertical bars indicate progressive levels of radioactivity (II) means Medium, (III) means High
- ★ This label is also made with the title Inflammable Gas
- † ISO Recommendation

 OXIDIZING AGENT	 COMPRESSED GAS	 OR  CORROSIVE	 NOXIOUS	 MAGNETIZED MATERIALS	
 PHOTOGRAPHIC MATERIALS	 PERISHABLE MATERIALS	 LIVE ANIMALS	Relief Shipments	 MEN, 15 years and up	 WOMEN, 15 years and up
 BOYS, 4-14 years	 GIRLS, 4-14 years	 INFANTS, 0-4 years	 OUTERGARMENTS (Overcoats, Raincoats)	 SUITS, TROUSERS, JACKETS, SHIRTS	 DRESSES, SKIRTS, BLOUSES
 UNDERWEAR, SOCKS	 SWEATERS, SWEATSHIRTS	 SHOES, BOOTS, SANDALS	 BLANKETS, BEDDING		

▲ This label is also made with the title Organic Peroxide
 ¶ ISO Recommendation

MOSCOW TO NEW YORK

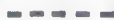
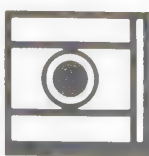
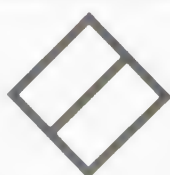
During a visit to the Soviet Union, I shipped a carton of toys home to the United States. Other than the address of destination, it had stencilled on it just three symbol directions:

2 arrows (this side up)
 a goblet (fragile)
 an umbrella (keep dry)

Considering that the shipment might be routed from Moscow via Constantinople, Piraeus, Genoa, and Lisbon before it reached the United States, and that the handlers in each port perhaps would not read any language other than their own, the message "spoke" in six tongues.



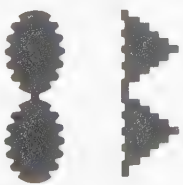
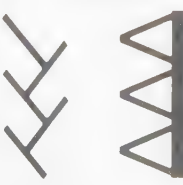
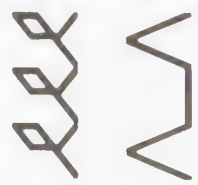
HOME ECONOMICS

Dressmaking and Tailoring					
	MATCH MARKS to ALTER SLEEVES	TAKE IN PANTS LEG	LET OUT PANTS LEG		
					
SHORTEN (Pins Out) LENGTHEN (Pins In)	LET OUT (Pins Outside); TAKE IN (Pin Out Excess)	SHORTEN to LINE	SHORTEN ONE SLEEVE ONLY	LENGTHEN amount between line and cuff	
 OR 					
CUTTING LINE	STITCHING LINE		DIRECTION of STITCHING	STRAIGHT GRAIN; GRAIN LINE	FOLD GRAIN
					
LENGTHEN and SHORTEN LINES	NOTCHES	SIZE of BUTTON and BUTTONHOLE	ZIPPER PLACEMENT		
Care Labelling	 OR 		 OR B		
	WASHABLE	LAUNDRER CAREFULLY	CAN BE BLEACHED		

- ▲ Number in symbol indicates temperature in degrees Centigrade (Celsius) for washing garment
- An X or / across the symbol negates its original meaning. Example: , Can Not Be Bleached

 OR  ▲ ● USE COOL IRON	 OR  ■ ■ USE MEDIUM HOT IRON	 OR  ■ ■ ■ USE HOT IRON	
 OR  ★ CAN BE DRY CLEANED	 CAN BE TUMBLE DRIED	 SHOULD BE LINE DRIED	 OR  SHOULD BE DRIED FLAT
 OR  OR  SHOULD BE DRIP DRIED	 WASH BY HAND	 DO NOT WASH	

Appliances

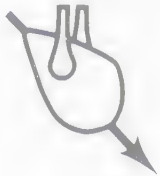
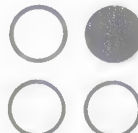
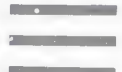
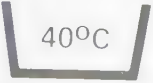
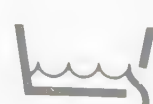
Sewing Machines	 STRETCH STITCH	 NEEDLE POSITION, LEFT	 NEEDLE POSITION, CENTER	 NEEDLE POSITION, RIGHT	 REVERSE STITCHING
 BOBBIN	 PATTERN DISC	 PATTERN DISC REMOVAL	 PRESSER FOOT PRESSURE	 OR  BUTTON HOLE	
 STITCH PATTERNS					

▲ The letters S for Steam and L for Little may also be used.

● One dot (•) indicates 120°C; two dots (••), 150°C; three dots (•••), 200°C.

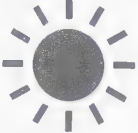
★ Circle may include a letter indicating type of dry cleaning agent to be used. Example: A any solvent; P perchloroethylene or white spirit; F white spirit only

■ A / or X, used to negate, may also be used on other symbols. Example:  , Do Not Iron.

Kitchen Equipment	 OR 				
	ROTISSERIE		GRILL	OVEN	OVEN LIGHT
					
WARMER; WARMER DRAWER	HOT SHELVES on STOVE	LEFT FRONT BURNER	LEFT REAR BURNER	RIGHT REAR BURNER	RIGHT FRONT BURNER
					
SIMMER	LOW HEAT	MEDIUM HEAT	HIGH HEAT	BLOWER, LOW	BLOWER, HIGH
					
BLOWER	DRIVE	SKILLET	DUTCH OVEN	MIXER	BLENDER
		Washing Machines			
GRINDER	ELECTRIC KNIFE		STOP for SPECIAL TREATMENT	ADD DETERGENT	BIODEGRADABLE
				OR	
WARM WASHING	PRE WASH	GENTLE ACTION WASHING	RINSING		RINSING with RINSING AGENT
					
HIGH WATER LEVEL	LOW WATER LEVEL	SPECIAL TREAT- MENT WASH	FLOATING WASHING	DRAINING	DRAIN; PUMP

▲ Temperature shown in degrees Centigrade (Celsius)

● An X or / across the symbol negates its original meaning. Example:  . Not Draining

	 OR 				
AGITATE	SPIN-DRYING		INCREASING ACTION	CUPBOARD DRY	DRYING
					
DRY; HEAT	TIME	START	FAST FORWARD	WEIGHT	OPEN DOOR or LID
					
D RIP PROOF	SPLASH PROOF	WOOLENS	BABY CLOTHES	DAINTY CLOTHES	OUTER GARMENTS
					
SYNTHETICS	SYNTHETIC/COTTON MIXTURE	TRICOT (Knitted)	TURKISH TOWELING	BED and TABLE LINEN	CURTAINS

FROM TRADEMARK INTO SYMBOL

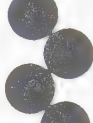
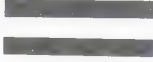
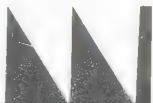
It is a rare occurrence when a trademark sheds its strictly commercial usage as a logo and emerges as a widely used symbol. But this is exactly what happened to the Woolmark symbol identifying "Pure New Wool."

Reminiscent of a sleek skein of yarn, this unique design is easily remembered. And it has been so expertly publicized and protected that it has become internationally accepted as a symbol for fine wool products.

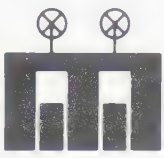
(Woolmark registered by International Wool Secretariat and usable only by their licensees. Reproduced here by special permission.)



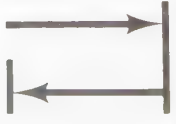
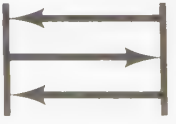
MANUFACTURING

					
ENGINEERING MATERIALS	MATERIAL REMOVAL	MATERIAL FORMING	CASTING, MOLDING and METALLURGY	CASTING	ROTATIONAL CASTING
					
EXTRUSION	INJECTION MOLDING	BLOW MOLDING	COMPRESSION MOLDING	THERMOFORMING	CALENDERING
					
SPREADING	LAMINATING	FINISHING and COATING	ASSEMBLY	PRODUCT, GENERALIZED	INSPECTION and QUALITY CONTROL
					
REGISTERING	CUTTING; SHEARING	SPLICING	CLOSING	WRAPPING, inner package	WRAPPING, outer package
		OR 			
TEAR TAPE	HEAT SEALING		IMPULSE or BEAD SEALING	END SEALING	LONGITUDINAL SEALING
	OR 	Industries			
MAINTENANCE				FACTORY DISTRICT	LIGHT MANUFACTURING
					
METALWORKING	IRON	FOOD PROCESSING	SERICULTURE (Silk)	TEXTILE	TEXTILE PROCESSING

▲ These symbols were originally designed for the plastics industry, but can also be used in other manufacturing processes

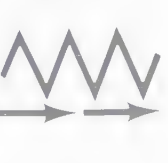
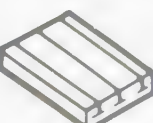
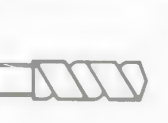
					
SLUICE	WATER POWER	STEAM POWER	ATOMIC POWER	ELECTRIC TRANSMISSION	ELECTRIC APPLIANCES
					
OIL	CERAMIC	CHEMICAL	LUMBER	PAPER	PRINTING
					
COAL MINING	MINING	BAUXITE	CHROME	COPPER	DIAMOND
					
GOLD	IRON	LEAD	MAGNESIUM	MANGANESE	NICKEL
					
SILVER	SULPHUR	TIN	TUNGSTEN	URANIUM	ZINC

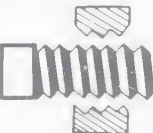
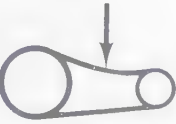
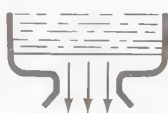
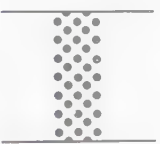
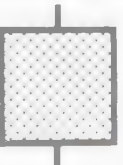
Heavy Duty Machinery

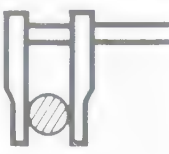
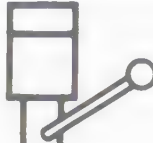
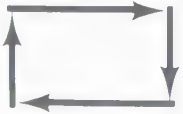
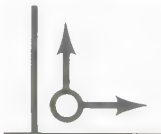
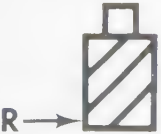
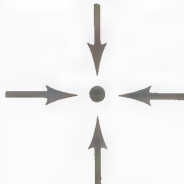
					
CONTINUOUS rectilinear motion	INTERRUPTED rectilinear motion	RECTILINEAR motion in 2 directions	LIMITED rectilinear motion	LIMITED rectilinear motion and return	OSCILLATING rectilinear motion, continuous

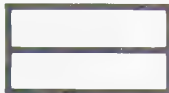
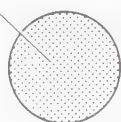
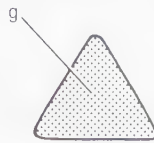
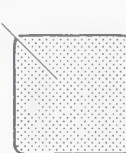
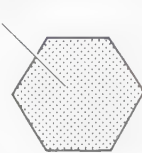
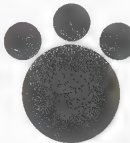
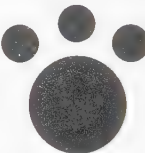
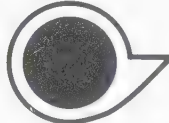
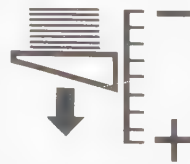
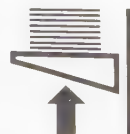
▲ Specific type of mining indicated by inserting a symbol. **Example:**  indicates Gold Mining;  , Iron Mining

¶ ISO Recommendation

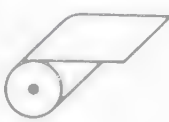
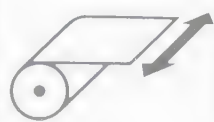
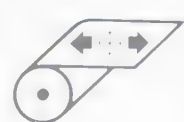
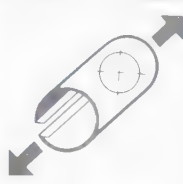
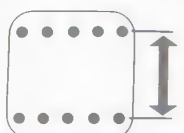
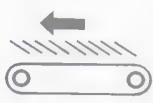
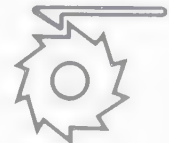
					
CONTINUOUS ROTATION	INTERRUPTED ROTATION	ROTATION in 2 directions	LIMITED ROTATION	LIMITED ROTATION and RETURN	OSCILLATING rotary movement, continuous
					
ONE REVOLUTION	SPINDLE ROTATION DIRECTION	FEED	LONGITUDINAL FEED	TRANSVERSE FEED IN	TRANSVERSE FEED OUT
					
VERTICAL FEED	JOG FEED	FEED START	FEED HOLD	FEED HOLD and FEED START	FEED RATE PER CENT
					
RAPID TRAVERSE	JOG TRAVERSE	CHANGE SPEED only in stopped position	CHANGE SPEED only in motion	THREADING	DRILLING CUT
					
PLANING CUT	TURNING CUT	MILLING CUT; GRINDING	CONVENTIONAL MILLING	CLIMB MILLING (Down Milling)	ELECTRIC MOTOR
					
WORK TABLE; SLIDE ELEMENT	WORK TABLE; ROTATING ELEMENT	TURNING SPINDLE	DRILLING SPINDLE	MILLING SPINDLE	GRINDING SPINDLE
					
COOLING PUMP	LUBRICANT PUMP	HYDRAULIC SYSTEM PUMP	TRACER	ENGAGE TRACER	DISENGAGE TRACER

					
MAIN SWITCH	START; ON	STOP; OFF	START and STOP with same BUTTON	IN ACTION as long as button is operated	EMERGENCY STOP; MASTER STOP
			OR 		OR 
BEGINNING MOTION	STOPPING MOTION	LOCK; TIGHTEN (Chuck Closed)		UNLOCK, UNCLAMP (Chuck Opened)	
					
BRAKE ON	BRAKE OFF	HALFNUT OPEN	HALFNUT CLOSED	BELT DRIVE	CHAIN DRIVE
					
BELT TENSION	CHAIN TENSION	GEAR DRIVE	FULL LEVEL	REFILLING	DRAIN
		OR 			
AIR VANE	FILTER		FILTER CLEANING	MAGNETIC FILTER	WATER SPRAY
					
COOLANT FLUID, OFF	COOLANT FLUID, INTERMITTENT	COOLANT FLUID, CONTINUOUS	BLOWING UNIT	SUCTION UNIT	VACUUM
					
STEAM INSPECTION WINDOW	STEAM	STEAM SPRAY	STEAM PRESSURE	TIMER ON	TIMER OFF

					
CONTROLLER CHART DRIVE	MEASURING, GENERAL	HAND CONTROL	FOOT SWITCH	STEPLESS REGULATION	CURVE; CAM
					
CLUTCH	SHEAR PIN CONSTRUCTION	WEIGHT	PRESSURELESS CONTAINER	LUBRICATION PRESS	OIL LEVEL WINDOW
Numerical Tape Control					OR 
	AUTOMATIC or Semi-automatic cycle	SINGLE AUTOMATIC CYCLE	ERROR or MALFUNCTION	DISTURBANCE	
					
TAPE	TAPE FORWARD	TAPE REVERSE	TAPE SEARCH	EXCESS LAG	AUTOMATIC CYCLE from TAPE
					
LOOP TAPE	REEL TAPE	SET-UP	INITIAL POSITION (Zero)	ORIGIN OFFSET	TOOL OFFSET
					
CUTTER RADIUS COMPENSATION	MANUAL DATA INPUT	DATA CLEAR, OUT, or RESET	MANUAL STEERING	IN POSITION	MIRROR IMAGE
Lubrication					
	LUBRICATION OILS A and B	CYLINDER OILS S and A	CYLINDER OILS B, C, and D	SPECIAL OILS without detergents	SPECIAL OILS with detergents

				 OR 	
HYDRAULIC FLUIDS and SYNTHETIC OILS	GREASE, SYNTHETIC OIL BASE	GREASE, MINERAL OIL BASE	FOR ENTERING THE NUMBER	DAILY LUBRICATION	
 OR 	 OR 	 OR 			
WEEKLY LUBRICATION	MONTHLY LUBRICATION	LUBRICATE on SCHEDULE			
					
PLATE ROLLER; PRINTING ROLLER	HIGH PRESSURE ROLLER	WATER DUCTOR ROLLER	PLATE ROLLERS, DOWN (Engaged)	PLATE ROLLERS, UP (Disengaged)	
 OR 		 OR 			
INK FOUNTAIN	INK DUCTOR	WATER FOUNTAIN	WATER DUCTOR		
					
INK STOP	INK FLOW	FEEDER READY or MOVING	VACUUM PAPER FEEDER, TILT	VACUUM PAPER FEEDER, VERTICAL	FEEDER to SPECIAL PLATE
					
BLOWER LEG PLATE	STACK RANGE	INITIAL PAPER STACK DELIVERY	FINAL PAPER STACK DELIVERY	TABLE DESCENT; SPEED MONITOR	TABLE RETURN
			 OR 		
STACK HEIGHT, LOW	STACK HEIGHT, HIGH	COMB	FEEDER, SHEET		

▲ Color indicates type of grease or oil. For grease: green, lime grease (shown); yellow, lithium; pink, soda. For oil: red, light weight; black, medium weight; orange, heavy weight; blue, hydraulic; white, slideway; red stripes on white, special purpose. A number within the figure indicates grade of grease or oil. Higher numbers mean higher viscosities. This does not apply on "special purpose" grease or oil where sequence numbers indicate the special type to be used.

 FEEDER DRIVE WHEELS	 JOGGER (Vibrating Table)	 ROLL WEB	 ROLL LATERAL CONTROL	 WEB or LINEAL REGISTER	 WEB TENSION CONTROL
 PLATE REGISTER, AXIAL	 PLATE REGISTER, ROTARY	 CROSS PERFORATION	 JUMP PERFORATION	 LINEAL PERFORA- TION and SLITTING	 LATERAL PUNCH CONTROL
 DELIVERY	 CREEPER INDEX	 CREEPER HEIGHT	 INDEX for NUMBERING UNIT	 NON-INDEX for NUMBERING UNIT	 BEATER
 GATHERING DETECTOR	 COLLATOR DETECTOR	 STROBE	 STATIC ELIMINATOR		

HOW TO AVOID A RASPBERRY CREAM

Do you open a box of chocolates — and hesitate?

You want a chewy caramel. But short of poking your finger into the bottom of each piece, how do you know what you will get?

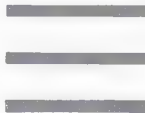
Try selecting by symbols!



You stand a good chance of getting what you are after if you correctly decipher the "squiggle" code with which most chocolates are marked.

But beware, this method isn't infallible: not all candy makers use the same symbols. You might still end up with that raspberry cream!

MATHEMATICS

				 OR 	
INFINITY	PLUS	MINUS	PLUS or MINUS	MULTIPLIED BY	
 OR 					
DIVIDED BY		EQUAL TO	NOT EQUAL TO	IDENTICALLY EQUAL TO	APPROXIMATELY EQUAL TO
 OR 					
PROPORTIONAL TO		SMALLER THAN	LARGER THAN	NOT SMALLER THAN	NOT LARGER THAN
					
SMALLER THAN or EQUAL TO	LARGER THAN or EQUAL TO	MUCH SMALLER THAN	MUCH LARGER THAN	PARTIAL DERIVATIVE	INDEFINITE INTEGRAL
					
TRIANGLE (Geom.); LAPLACIAN (Vector)	INCREMENT (Calculus)	DEL (Vector)	d' ALEMBERTIAN	ANGLE	PERPENDICULAR TO
					
PARALLEL TO	CONGRUENT	MEASURED BY	THEREFORE	THERE EXISTS	FOR ALL
					
UNION	INTERSECTION	INCLUDED IN	CONTAINS	IMPLIES	IF and ONLY IF

▲ When X in bold face (**X**) , means Vector Product (Vector).

¶ ISO Recommendation

$\ni$	$\in$	$\notin$	Σ	$\log$	$\ln$
SUCH THAT	BELONGS TO	DOES NOT BELONG TO	SUM	LOGARITHM	NATURAL LOGARITHM
e	π	$\sqrt{\quad}$	$!$	$ $	$\langle \rangle$
"e" (2.71828...)	PI (3.1416...)	n 'th ROOT OF x	FACTORIAL n	MAGNITUDE OF x	MEAN VALUE OF x

THE RHYTHM OF LIFE

In ancient times, the Chinese believed that the world was created by the spontaneous separation of an amorphous ether into heaven and earth, the Yin and the Yang — and that everything originated with them.



A flowing S line divides the circle into two equal areas. The dark shape is the female Yin, the light one is the male Yang; the light spot in the Yin is the male germ in the female, and conversely the dark spot in the Yang is the female germ in the male. Thus each of these opposites carries the essence of the other.

Countless qualities are attributed to each form.



YIN

Female
Passive
Moon
Earth
Black in color
Ox
Even numbers
Cold
Dark
Valleys and Streams



YANG

Male
Active
Sun
Heaven
Red in color
Horse
Odd numbers
Warm
Bright
Hills and Mountains

Yin and Yang when interlocked, represent perfect unity, the universe, eternity.

Sometimes the combined Yin-Yang is surrounded by trigrams, an arrangement of cabalistic lines which have definite characteristics and meanings. Yang is represented by an unbroken line, Yin by a broken one. One such arrangement is shown here.



 K'UN Southwest, mother, earth, black, ox, afternoon, late summer

 SUN Southeast, eldest daughter, wind, white, cock, forenoon, late spring

 LI South, middle daughter, lightning, sun, fire, pheasant, noon, mid-summer

 TUI West, youngest daughter, lake or marsh, sheep, evening, mid-autumn

 CH'IENT Northwest, father, heaven, deep crimson, horse, night, late autumn

 CH'EN East, eldest son, thunder, yellow-green, dragon, dawn, spring

 K'AN North, middle son, moon, rain, clouds, bright red, pig, midnight, mid winter

 K'EN Northeast, youngest son, mountain, dog, pre-dawn, late winter

MEDICINE

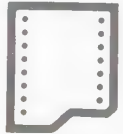
					
CADUCEUS; Staff of Hermes (Mercury)	STAFF of AESCULAPIUS	MEDICAL ALERT	RED CROSS	RED LION and SUN	RED CRESCENT
					
RED STAR of DAVID	PSYCHOLOGY	VETERINARY SERVICES	IN RELATION TO	CUM (With)	SINE (Without)
					
INJECTIONS; VACCINATION	BY HYPODERMIC	INTRAVENEOUSLY	INTRAMUSCULARLY	ORALLY	RECTALLY
					
MURMUR	DISTAL	PROXIMAL	MILD LIMITATION	MODERATE LIMITATION	SEVERE LIMITATION
					
MILD	NORMAL; Moderate	INCREASED; Moderately Severe	MARKEDLY INCREASED; Severe	BIRTH	DEATH
					
NO DATA	CHANGE	CIRCUMDUCTION	CONCENTRATION	TRIPLE ARTHRODESIS	ROTATION
					
PRESCRIPTION; TREATMENT	MISCE (Mix)	EXTENSOR; EXTENSION	FLEXOR; URINE	DEFECATION	URINE and DEFECATION

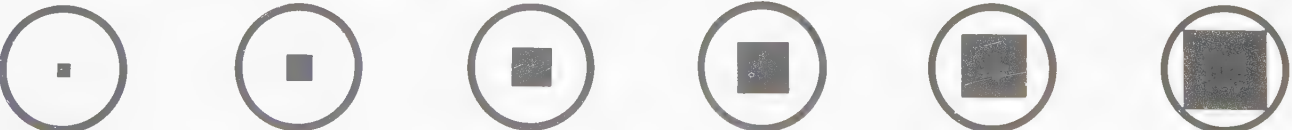
- ▲ Members of the League of Red Cross Societies. The Red Crescent is used in some predominantly Moslem countries; the Red Lion and Sun is used in Iran
- Sign of Magen David Adom, the humanitarian relief organization in Israel.

MEDICINE *(continued)*

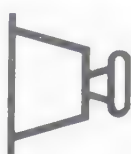
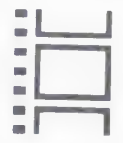
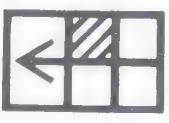
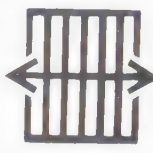
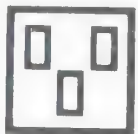
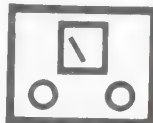
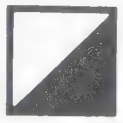
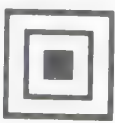
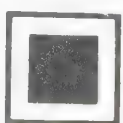
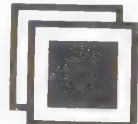
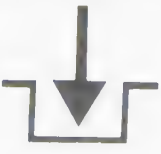
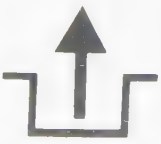
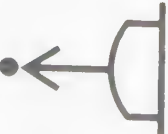
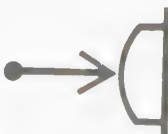
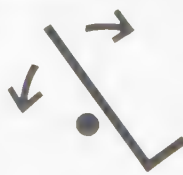
					
FRACTURE	ONE	TWO	APOTHECARIES' SCRUPLE	DRAM	OUNCE
	OR 			OR 	
MOLAR		PRE-MOLAR	INCISOR		VASECTOMY
					
U.S.A.	Korea	India	Brazil		
PLANNED PARENTHOOD					

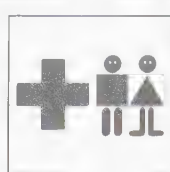
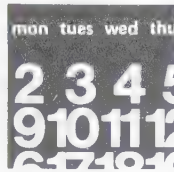
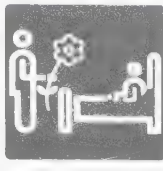
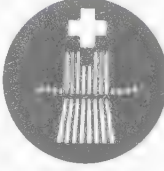
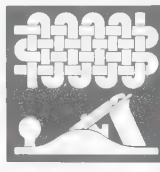
Equipment

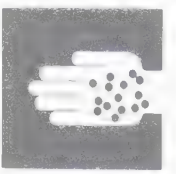
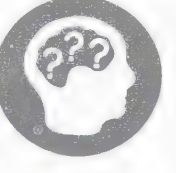
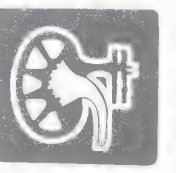
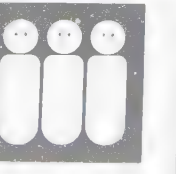
					
ADD	DISPENSE	TRANSFER	FLAME PHOTOMETER	SPECTRO-PHOTOMETER	CONCENTRATION PRINTER
					
CENTRIFUGE	MIX	HEAT	COOL	START	STOP
					
UNWRAPPED (Sterilizers)	WRAPPED (Sterilizers)	LIQUIDS (Sterilizers)	BACK TABLE ADJUSTMENT	SIDE TABLE ADJUSTMENT	FOOT TABLE ADJUSTMENT

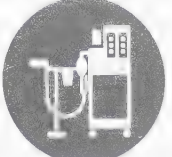
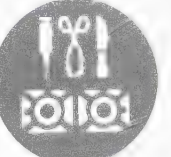
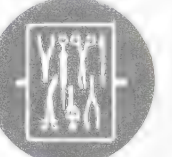
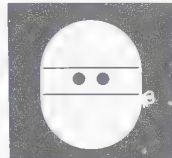
 FLEX TABLE ADJUSTMENT	Electro-Medical	 ON	 OFF	 AUTOMATIC	 MANUAL
 LEFT-HAND MINUS TERMINAL	 RIGHT HAND MINUS TERMINAL	 COAGULATION	 CUTTING	 RESECTION	 FOOT SWITCH
 FUSE	 NEUTRAL GRID ELECTRODE	 CAUSTIC	 FULGURATION	 ENDOSCOPY	 RADIATION from 1 ELECTRODE
 RADIATION from 2 ELECTRODES	 SPARK GAP REGULATION	 GALVANIZATION	 FARADIZATION	 TUBE CURRENT	 SPARK GAP CURRENT
 DANGEROUS DISORDER	 RESONANCE	 CONSTANT CURRENT	 THRESHOLD CURRENT	 DELTA CURRENT	 TRAPEZE CURRENT
 RADIATION QUANTITIES					
Radiology	 RADIOACTIVE	 X-RAY TUBE	 X-RAY TUBE ASSEMBLY	 FLOOR MOUNTED EQUIPMENT	 CEILING MOUNTED EQUIPMENT

▲ Radiation intensity is shown increasing from left to right

					
BODY SECTION RADIOGRAPHY	FILM CHANGER	RADIOGRAPHY	FLUOROGRAPHY CAMERA	IMAGE AMPLIFIER	FLUOROSCOPY
					
MOTION PICTURES (Fluoroscopic)	FILM FEED	SPOT FILM DEVICE	KYMOGRAPH	MOVEABLE GRID	LAYER LEVEL (Body Adjustment)
					
X-RAY TELEVISION	NORMAL FIELD	ENLARGED FIELD	BRIGHTNESS	ILLUMINATION LIGHT	RED LIGHT
					
DIAPHRAGM OPEN	DIAPHRAGM CLOSED	AUTOMATIC EX-POSURE CONTROL	CONSOLE SWITCH	HAND SWITCH	FOOT SWITCH
					
CONTRAST	BLACKENING	FINE FOCAL SPOT	SMALL FOCAL SPOT	LARGE FOCAL SPOT	STEREO FOCAL SPOT
					
LONGITUDINAL MOTION	TRANSVERSE MOTION	VERTICAL MOTION	ROTARY MOTION	SLOW MOTION	RAPID MOTION
					
LOCK	UNLOCK	COMPRESSION	DECOMPRESSION	FOOTPLATE MOTION	TABLE TILT

			 OR 	
HOSPITAL	CLINIC	AMBULANCE	EMERGENCIES	CHILDREN'S EMERGENCY
	 OR 			
APPOINTMENTS	REGISTRATION	ADMISSIONS	MEDICAL RECORDS	PRAYER; MEDITATION
 OR 				
ACCESS for the HANDICAPPED	VISITORS	VOLUNTEERS	CLINICAL ROOM	OUT-PATIENT DEPARTMENT
	 OR  OR 			
TEMPORARY HOSPITALIZATION	PHYSICAL THERAPY	OCCUPATIONAL THERAPY	CHILD CARE	
				
PEDIATRIC CLINIC	PEDIATRICS	NURSES	SENIOR NURSE	NURSES' WORKING ROOM
				
DRESSING ROOMS, NURSES	DRESSING ROOMS, female technicians	DRESSING ROOMS and BATHROOMS	CLEAN CLOTHING	SOILED CLOTHING
 OR 				
BLOOD DONORS	HEMATOLOGY	BLOOD BANK	SERUM LABORATORIES	LABORATORY

					
EXPERIMENTAL SURGERY	PATHOLOGY	FRIGORIFICS	REFRIGERATION of CADAVERS	RECEPTION of CADAVERS	GENERAL MEDICINE
				OR 	
OPHTHALMOLOGY	OTORHINO-LARYNGOLOGY	DERMATOLOGY	DENTIST		PROSTHETICS
				OR 	
NEUROLOGY	NEUROSURGERY	NEPHROLOGY	ORTHOPEDICS		MENTAL HYGIENE
					
CHEST CARE	CARDIOLOGY	PULMONARY PHYSIOLOGY	BRONCHO-ESOPHAGOLOGY	ONCOLOGY	CASTS
					
SPEECH and HEARING	PHONIATRICS	HEAD of PHONIATRICS	HYDROTHERAPY	X-RAYS	X-RAY INTERPRETATION
					
ENDOSCOPY	RADIOTHERAPY	ELECTRO-CARDIOGRAMS	ELECTROENCEPH-ALOGRAPHY	ELECTROTHERAPY	TAKING of SPECIMENS
					OR 
MATERNITY	NURSERY	MILK LABORATORY	ANTHROPOMETRY	PERINATOLOGY	

					OR	
CHILD CARE EDUCATION	CATHETERIZATION LABORATORY	RESUSCITATOR	ANESTHESIOLOGY	STERILIZATION and EQUIPMENT		
		OR				
SEPTIC ROOM	GENERAL SURGERY		OPERATING ROOM	OBSERVATION ROOM		RECOVERY ROOM

TWO SNAKES, OR ONE?

Aesculapius, the mythological god of medicine, carried a knotty wooden staff entwined with a *single* snake representing life-giving powers. In 1910 the American Medical Association adopted this staff as its insignia. The British and French armies, World Health Organization, U.S. Air Force Medical Service, and other groups the world over, also use this staff and single snake to identify their medical professionals.

But to confuse the situation, the Caduceus, a staff with *two* snakes coiled around it, is the official symbol of the U.S. Army Medical Corps, Navy Pharmacy Division, and Public Health Service.

This two-snake design dates back some 4,000 years to Babylon. It reappeared in Greek mythology with a pair of wings added, as Hermes' wand, and called the Caduceus, a name derived from the Greek word meaning herald's wand or staff.

In ancient Rome the name for Hermes was Mercury and messengers carried his symbol as a sign of neutrality. And so their medicos, searching battlefields for the wounded, carried the Caduceus to establish their noncombatant status.

This doubtless is the justification for the U.S. Army's and Navy's use of the two-snake insignia. Traditionalists hold out for the single snake of Aesculapius to mark the medical profession, contending that the Greek Hermes or the Roman Mercury had little to do with medicine. Indeed, they say he did quite the reverse, for it was he who accompanied the dead from earth to Hades — hardly a healing process.



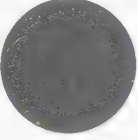
METEOROLOGY

VISIBILITY reduced by smoke	HAZE	LIGHT FOG	HEAVY FOG; ICE FOG	DUST WHIRLS	DUST or SAND STORM
TORNADO (Funnel Cloud)	TROPICAL STORM	HURRICANE	SQUALL	DRIZZLE	SLIGHT FREEZING DRIZZLE
SLIGHT RAIN, INTERMITTENT	SLIGHT RAIN, CONTINUOUS	MODERATE RAIN, INTERMITTENT	MODERATE RAIN, CONTINUOUS	HEAVY RAIN, INTERMITTENT	HEAVY RAIN, CONTINUOUS
PRECIPITATION during Past Hour	INCREASED Phenomenon during Past Hour	DECREASED Phenomenon during Past Hour	PRECIPITATION not REACHING GROUND	PRECIPITATION landing far from station	PRECIPITATION landing near station
SHOWERS	HAIL	RAIN SHOWERS, moderate or heavy	RAIN SHOWERS, violent	SLIGHT SHOWERS of SNOW PELLETS	SLIGHT SHOWERS of HAIL
LIGHTNING	THUNDERSTORM	THUNDERSTORM moderate, with hail	THUNDERSTORM heavy, with hail	ICE PRISMS	SNOW GRAINS
ICE PELLETS (Sleet)	SNOW	STARLIKE SNOW CRYSTALS	DRIFTING SNOW, slight to moderate	DRIFTING SNOW, heavy	BLOWING SNOW, slight to moderate

▲ Progression of precipitation intensity may be indicated as in Rain.

● Heavy Blowing Snow is indicated by ➡

Note: Weather symbols can be combined. Example: means Moderate or Heavy Freezing Rain, Slight Rain Showers.

Wind Speed	 WIND calm	 WIND approx. 1mph (1 Knot)	 WIND approx. 6mph (5 Knots)	 WIND approx. 12mph (10 Knots)	 WIND approx. 58mph (50 Knots)
Weather Fronts	 WARM FRONT, ALOFT	 WARM FRONT, SURFACE	 COLD FRONT, ALOFT	 COLD FRONT, SURFACE	 OCCLUDED FRONT, SURFACE
 STATIONARY FRONT, SURFACE	Sky Coverage	 CLEAR SKY	 SCATTERED CLOUDS, 0.1 or less	 SCATTERED CLOUDS, 0.2 or 0.3	 SCATTERED CLOUDS, 0.4
 SCATTERED CLOUDS, 0.5	 BROKEN CLOUDS, 0.6 - 0.9	 BROKEN CLOUDS, 0.6	 BROKEN CLOUDS, 0.7 or 0.8	 BROKEN CLOUDS, 0.9	 OVERCAST
 OVERCAST, COMPLETE	 OVERCAST; SKY OBSCURED	Clouds	 STRATUS and/or FRACTOSTRATUS	 FRACTOSTRATUS, Fractocumulus (Scud)	 ALTOSTRATUS, thin, semi-transparent
 ALTOSTRATUS, thick	 STRATOCUMULUS, spreading from cumulus	 STRATOCUMULUS, not from cumulus	 CUMULUS, little vertical development	 CUMULUS and STRATOCUMULUS	 CUMULUS, considerable development
 CUMULONIMBUS, clear-cut tops lacking	 CUMULONIMBUS clear top	 ALTOCUMULUS, thin, semi-transparent	 ALTOCUMULUS, thin, patches	 ALTOCUMULUS, in bands and thickening	 ALTOCUMULUS, double-layered

- ▲ Line drawn in direction from which wind is blowing, toward station circle; half barb, barbs and pennants may be combined. Example:  means 75 knots north westerly wind.
- Used in aviation weather reports (however,  means 0.1 to 0.5 in aviation)

					
ALTOCUMULUS spreading from cumulus	ALTOCUMULUS, tufts or turrets	ALTOCUMULUS of chaotic sky	CIRRUS filaments (Mare's Tails)	CIRRUS, dense, patches, tufts	CIRRUS, dense, anvil shaped
					
CIRRUS, hook- shaped, thickening	CIRRUS and Cirrostratus, over 45°	CIRRUS and Cirrostratus, not 45°	CIRROSTRATUS, not increasing	CIRROSTRATUS, veil covering sky	CIRROCUMULUS

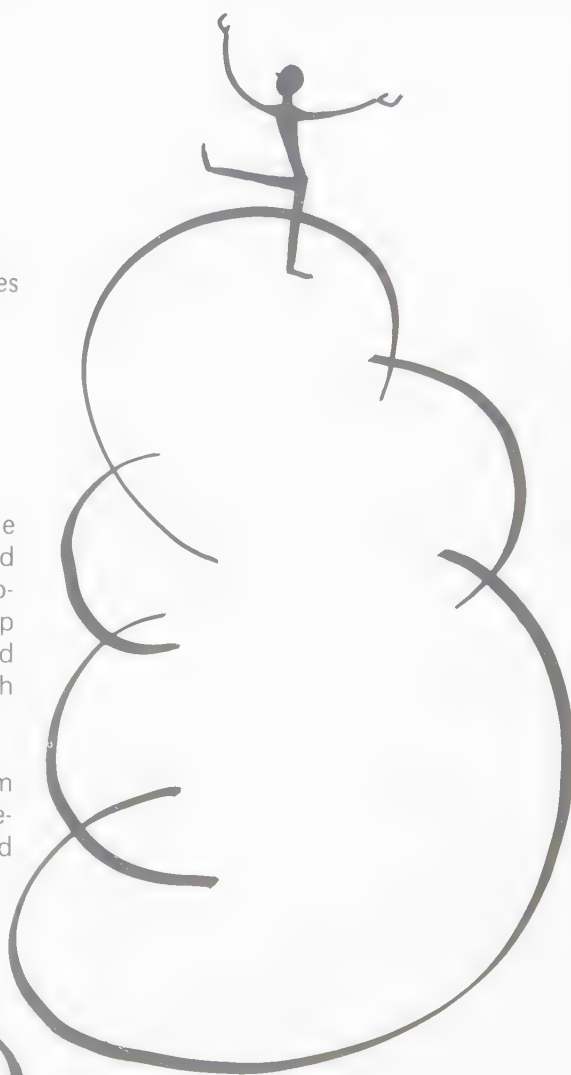
CLOUD 9

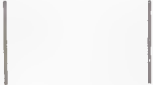
When we say that someone is on Cloud 9, it indicates that he is in a state of euphoria.



In all probability the expression is derived from the fact that in the meteorological synoptic code, cloud types are assigned numbers. Cloud 9 is the cumulonimbus cloud — billowy, with a flat base, its top often extending up to 40,000 feet or more. To avoid this cloud, airplane pilots must indeed fly high, which in the vernacular might suggest exuberance.

But the paradox is this: Cloud 9 is a violent storm cloud, a thunderhead, and extremely unstable — representing anything but the kind of state any of us would like to be in.

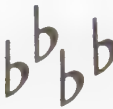
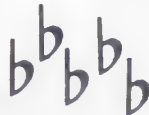
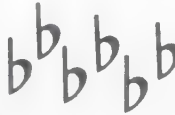
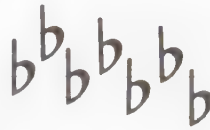


					
STAFF	TREBLE (G) CLEF	BASS (F) CLEF	ALTO (C) CLEF	BAR LINE	MEASURE
				 OR 	
FINAL BAR	WHOLE NOTE	HALF NOTE	QUARTER NOTE	EIGHTH NOTE	
 OR 					
SIXTEENTH NOTE		WHOLE REST	HALF REST	QUARTER REST	EIGHTH REST
					
SIXTEENTH REST	MEASURES REST	TRIPLET	3/4 TIME	4/4 TIME	2/2 TIME

123

MUSIC *(continued)*

					
6/8 TIME	5/8 TIME	TRIAD	ARPEGGIO; Rolled 7th Chord	SHARP	FLAT
					
NATURAL	DOUBLE SHARP	DOUBLE FLAT	DISSONANCE	PIANO (Soft)	PIANISSIMO (Very Soft)
					
FORTE (Loud)	FORTISSIMO (Very Loud)	SFORZANDO	CRESCENDO	DECRESCENDO	SWELL
					
TIE	SLUR	GLISSANDO	LEGATO	NON LEGATO	APPOGGIATURA
					
ACCIACCATURA	REPEAT	REPEAT 1 MEASURE	REPEAT 2 MEASURES	REPEAT FROM BEGINNING	SEGNO
					
RETURN to SEGNO	TREMOLO	TURN	TRILL	MORDENT	STACCATO
					
MARCATO	TENUTO	FERMATA	DEPRESS Damper- Pedal (Piano)	RELEASE Damper- Pedal (Piano)	FLUTTER (Wind)

			Key Signatures			
STOPPED TONE (Horn)	UP BOW	DOWN BOW			G major, E minor	D major; B minor
						
A major; F - sharp minor	E major; C - sharp minor	B major; G - sharp minor		F - sharp major; D - sharp minor		
						
C - sharp major; A - sharp minor	F major; D minor		B - flat major; G minor		E - flat major; C minor	A - flat major; F minor
						
D - flat major; B - flat minor	G - flat major E - flat minor			C - flat major; A - flat minor		

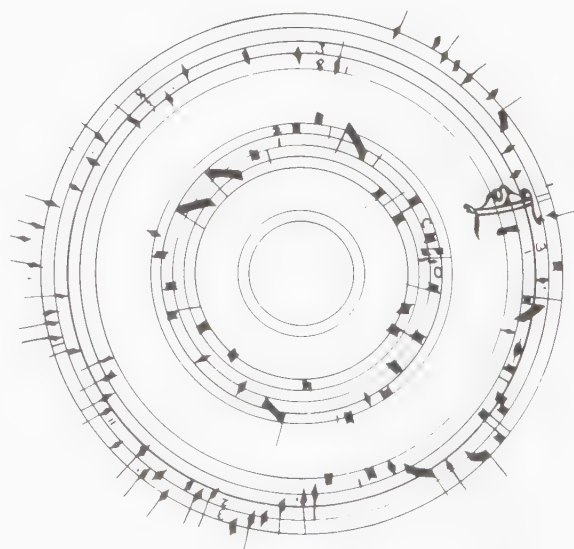
A 15th-CENTURY ROUND

No matter if it be "Sumer is icumen in" as sung in the 14th century or "Row, row, row your boat" which was introduced several centuries later, the round has great appeal.

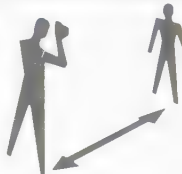
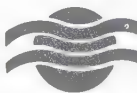
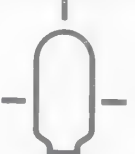
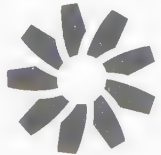
In a round, one singer starts a song and at a prescribed time a second singer joins in with the same song, then a third, etc. Thus, a kind of counterpoint results.

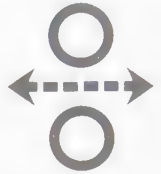
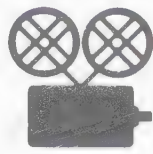
A 15th-century calligrapher took the term "round" literally and wrote his tune in disc-like fashion and, I daresay, spun it around so the proper note came in front of the singer when it was his turn to join in.

(Drawing reproduced by permission of Musée Chantilly. Photo by Giraudon.)



PHOTOGRAPHY

		 OR 			
CLOSE-UP	GROUPS	INFINITY		CAMERA/SUBJECT DISTANCE	FOCUS
		 OR 		 OR 	
ZOOM	FOCAL PLANE (Film Plane)	BRIGHT or HAZY SUN; SAND; SNOW		BRIGHT or HAZY SUN, distinct shadows	
 OR 		 OR 		 OR 	
CLOUDY BRIGHT, no shadows		OPEN SHADE, cloudy dull		HEAVY OVERCAST	
 OR 					
TYPE "A" FILTER		USE FLASH	BATTERIES	FLASH CUBE	INDOORS without FLASH
		 OR 		 OR 	
LAMP	LAMP OFF	LAMP DIMMED LOW		LAMP on HIGH	
					
EJECT LAMP		FAN	FILM THREAD	PROJECT	REWIND
				FRAMING	
 OR 		 OR 		 OR 	
FORWARD		STILL		REVERSE	

					
ELEVATE	LEVEL	LOCK	UNLOCK	PROCESS	LOAD
	 OR 				
LIGHTEN; DARKEN	DOCUMENTARY FILM	PROJECTION ROOM			

WHIRLIGIG

The fact that an ignominious fanatic placed a Swastika on his battle flag is insufficient reason for ignoring this symbol's historic significance.



The Swastika has been whirling around since prehistory and used in widely separated cultures as a favorable symbol representing many things to many people: the supreme deity, infinity, the sun's power, the four winds, well being, the succession of generations. Long before the white man appeared in the Western Hemisphere, the Swastika showed up on pre-Columbian artifacts, and many a Navajo wove it into blankets and baskets.

Yet no one can trace the origin of the Swastika.

Did sun worshippers create it by cutting into the perimeter of the sun circle?



It is related to the anatomical three-legged triskelion, which indeed races around showing movement as well as any symbol we know?



Was it reborn in the Greek gammadion, by joining four gamma letters together?

Swastikas face clockwise or counterclockwise. In India the former relates to the masculine and signifies leading to the outer world; the latter represents the feminine and indicates leading to the inner mind of man.



Time is bound to erase the association of the Swastika with the Nazi holocaust. Then one of the most distinctive of graphic symbols will be absolved of its latter-day stigma and its early meanings will again be known.



PHYSICS

CARTESIAN COORDINATES	VECTOR	VECTOR directed out of page	VECTOR directed into page	MASS	CENTER of GRAVITY
INCLINED PLANE	PIVOT (Hinge)	PULLEY	SUBSTANTIAL SURFACE (Wall)	FRICTIONLESS CONTACT	SPRING; COUPLING
LEVER ARM	FULCRUM (Knife Edge)	CONVEX LENS; Focusing Magnet	CONCAVE LENS	PRISM; BEAM-BENDING MAGNET	LIGHT SOURCE
COLLIMATOR (Slit)	BEAM SPLITTER	MIRROR	EYE	POSITIVE CHARGE	NEGATIVE CHARGE
POLARIZATION; ELECTRIC DIPOLE	LINES of FORCE	EQUIPOTENTIALS	MAGNETIC DIPOLE	WAVE	LONGITUDINAL WAVE
WAVEFRONTS	SPIN (Rotation)	PARTICLE SPIN; MAGNETIC DIPOLE	PHOTON	RADIATIVE TRANSITION	ABSORPTIVE TRANSITION
SCATTERING, COMPTON	SCATTERING, Electron-Proton	VOLTMETER	AMMETER	GALVANOMETER	

▲ Also shown as

● Feynman Diagram

Letter Symbols

A AMPERE; AREA; MASS NUMBER	h HECTO; PLANCK CONSTANT; HEIGHT	(hkl) LATTICE PLANE
B MAGNETIC FLUX DENSITY	k KILO; BOLTZMANN CONSTANT	$[hkl]$ DIRECTION in LATTICE
C COULOMB; CAPACITANCE; COMPTON WAVELENGTH	l LITER; LENGTH; MEAN FREE PATH	$\text{\AA}$ ANGSTROM
E ENERGY; ELECTRIC FIELD STRENGTH	m METER; MILLI	$^{\circ}\text{C}$ DEGREE CELSIUS
F FARAD; FORCE	n NANO; NEUTRON; REFRACTIVE INDEX; NUMBER DENSITY of MOLECULES	$^{\circ}\text{F}$ DEGREE FAHRENHEIT
G GAUSS; GIGA; GRAVITATIONAL CONSTANT	p PICO; PROTON; MOMENTUM	Ω OHM; SOLID ANGLE
H HENRY; MAGNETIC FIELD STRENGTH	r RADIUS	μ MICRO; MUON; PERMEABILITY; MAGNETIC MOMENT OF PARTICLE; ATTENUATION COEFFICIENT
I ELECTRIC CURRENT; MOMENT of INERTIA	s SECOND	Λ LAMBDA PARTICLE
J JOULE	t TON; TRITON; TIME	Σ SIGMA PARTICLE
K KELVIN; K-MESON	v or v VELOCITY	Ξ XI PARTICLE
L ANGULAR MOMENTUM; SELF-INDUCTANCE	a₀ BOHR RADIUS	α ALPHA PARTICLE; FINE STRUCTURE CONSTANT
M MEGA	atm ATMOSPHERE	π PION
N NEWTON; NUMBER of MOLECULES; NEUTRON NUMBER	cd CANDELA	γ PHOTON; TIME DILATION FACTOR
P POWER	Ci CURIE	ν NEUTRINO; FREQUENCY;
Q ELECTRIC CHARGE; QUALITY FACTOR	da DEKA	ω SOLID ANGLE; ANGULAR VELOCITY; ANGULAR FREQUENCY
R RESISTANCE	eV ELECTRONVOLT	λ WAVELENGTH; MEAN FREE PATH; DECAY CONSTANT
T TESLA; TERA; PERIOD	Hz HERTZ	τ RELAXATION TIME; TIME CONSTANT
V VOLT; ELECTRIC POTENTIAL; VOLUME	lm LUMEN	ρ DENSITY
W WATT; WORK	lx LUX	β PARTICLE SPEED DIVIDED BY SPEED OF LIGHT
Z IMPEDANCE; ATOMIC NUMBER	m_H HYDROGEN ATOMIC MASS	ϕ PHASE DISPLACEMENT
b BARN; BREADTH	mmHg MILLIMETER of MERCURY	ϵ PERMITTIVITY
c CENTI; SPEED of LIGHT in a VACUUM; MOLECULAR VELOCITY	mol MOLE	Θ CHARACTERISTIC TEMPERATURE
d DECI; DISTANCE BETWEEN LATTICE PLANES; THICKNESS; DIAMETER; DEUTERON	N_A AVOGADRO CONSTANT	σ STEFAN-BOLTZMANN CONSTANT; CROSS SECTION
e ELECTRON; PROTON CHARGE	R RYDBERG CONSTANT	Ψ WAVE FUNCTION
f FEMTO; FREQUENCY	rad RADIAN	θ BRAGG ANGLE
g GRAM; ACCELERATION of FREE FALL	r_e ELECTRON RADIUS	
	sr STERADIAN	
	Wb WEBER	

A GLOBAL WORD

In the language of the American Indian Choctaw tribe, OKEH translates into "it is so."

Bostonians contend OK stems from an illiterate spelling — "Oll Korrekt."

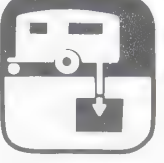
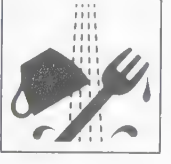
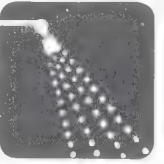
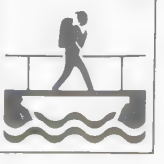
Perhaps the most authoritative explanation refers to the O.K. Club, formed in 1840 by the partisans of Martin Van Buren, then President of the United States. This alluded to his nickname "Old Kinderhook" which came from his birthplace, Kinderhook, New York.

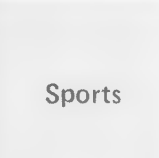
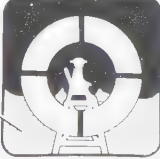
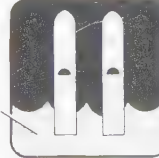
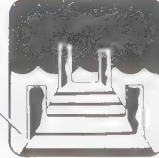
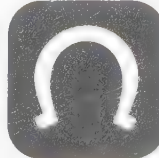
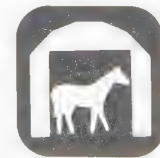
OK (and spelled out okay, okey, or okeh) knows no geographical boundaries — it is used in Kenya or Greenland.

Its meaning is clear, but its origin is controversial and anyone's guess. OK?

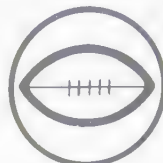
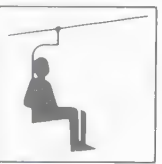
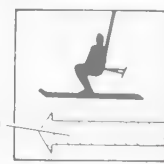
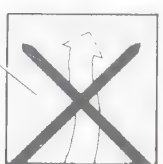
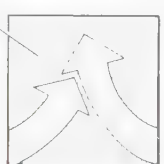
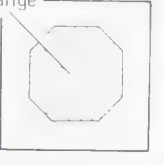
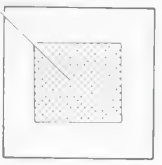
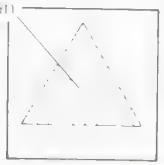
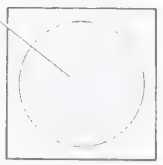
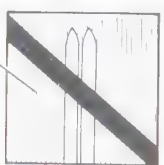
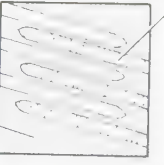
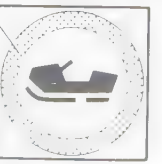
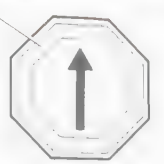
OK.

RECREATION

					
REPORT FIRES	USE YOUR ASHTRAY	CRUSH SMOKES	BREAK MATCHES	CAMPFIRES	DROWN CAMPFIRES
					
NO FIRES	NO FIREWORKS	SMOKEY the BEAR (Forest Fire Prevention)	SPARKY the FIRE DOG (Fire Protection)	RANGER STATION	LOOKOUT TOWER
	OR 				
LODGINGS		HOSTEL; PIONEER CABIN	TRAILER SANITARY STATION	TRAILER SITES	UTILITY OUTLET
					
DISHWASHING	COLD SPRING	WASHING FACILITY	BATH and SHOWER	DOGS ALLOWED	NO DOGS
					OR 
KENNEL	PLAYGROUND	AMPHITHEATER	COUNCIL RING	VIEW or CAMERA POINT	
			OR 		
CAMPGROUND	GROUP CAMPING	PICNIC AREA		PICNIC SHELTER	SLEEPING SHELTER
				OR 	
TRAIL SHELTER	FOOT BRIDGE	FORDING PLACE	HIKING TRAIL		NATURE TRAIL

					
SELF-GUIDING NATURE TRAIL	AUTO NATURE TRAIL	DEER AREA	BEAR AREA	FISH HATCHERY	TRAMWAY
					
BICYCLE TRAIL	TRAIL BIKE TRAIL	JEEP TRAIL	VEHICLE FERRY	TOURIST ACTIVITIES	HISTORIC PLAQUE
					
CAVERNS	DAM	LIGHTHOUSE	CULTURAL MONUMENT	MUSEUM	MINERAL SPRING
					
AUDITORIUM	THEATER	BAND	Sports	WATER SPORTS AREA	FISHING
					
GUARD on DUTY	BEACH	SCUBA DIVING	DIVING	CAUTION: DEEP WATER (Drop-off)	CAUTION: ROCKS
					
WATER SKIING	DOCK	MARINA	LAUNCHING RAMP	MOTOR BOATING	
					
ROW BOATING	BOATING (Sail)	HORSE TRAIL			STABLE

RECREATION *(continued)*

					
FIREARMS	HUNTING	ARCHERY	SHOOTING RANGE	FOOTBALL	SOFTBALL
			OR 		
BASEBALL	LITTLE LEAGUE	GOLF		POOL (Billiards)	SHUFFLEBOARD
		OR 			
PING-PONG	TENNIS		WINTER SPORTS AREA	WINTER RECREATION AREA	SKI TRACK
			OR 		
LIGHTED SKI TRACK	TOWLIFT; T-BAR	CHAIR LIFT		TRAIL CLOSED	TRAILS MERGE
					
CLOSED: AVALANCHE AREA	EXTRA CAUTION AREA	EASIER SKI RUN	MORE DIFFICULT SKI RUN	MOST DIFFICULT SKI RUN	NO SCHUSSBOOMING
					
CONGESTED AREA	WARMING HUT	EMERGENCY TELEPHONE	SLEDDING	SKI BOBBING	SNOW PLAY
					
SNOWMOBILING	SNOWMOBILE TRAIL	SNOWMOBILES PROHIBITED	SNOWMOBILE TRAIL, DIRECTION	SNOWMOBILE CROSSING	THIN ICE (Snowmobile)

		Games			
ICE SKATING	THIN ICE		NOON (Ness, Miracle), Do nothing	GIMMEL (Gadol, Great), Win whole pile	HE' (Haya, Happened), Win half pile
					
SHIN (Sham, There), Put in one piece	PE' (Po, Here), Put in one piece	SPADES	HEARTS	DIAMONDS	CLUBS
					
KING	QUEEN	BISHOP	KNIGHT	ROOK	PAWN
Tarot Cards					
	THE JUGGLER	POPE JOAN	THE EMPRESS	THE EMPEROR	THE POPE
					
THE LOVERS	THE CHARIOT	JUSTICE	THE HERMIT	WHEEL of FORTUNE	STRENGTH
					
THE HANGED MAN	DEATH	TEMPERANCE	THE DEVIL	HOUSE of GOD	THE STAR
					
THE MOON	THE SUN	THE JUDGEMENT	THE WORLD	THE FOOL	

- ▲ Symbol is a Hebrew letter which appears on a four-sided top used in the game of Dreydle. For example, נ is the letter Noon, standing for the word Ness, which means Miracle in English. When this turns up on the top, the player does nothing.
- Pe' is used instead of Shin when playing the game in Israel.
- ★ Suits of playing cards.
- Pieces used in chess.

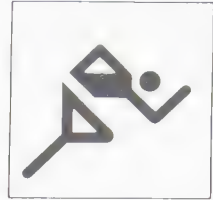
1948

1964

1968

1972

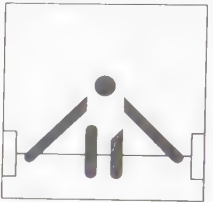
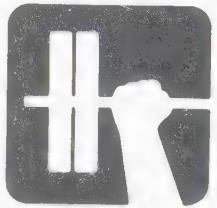
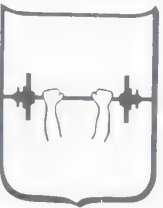
Track and
Field



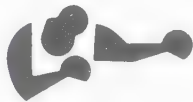
Gymnastics



Weight
Lifting



Boxing



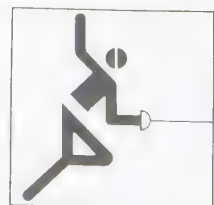
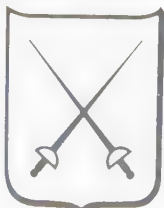
Judo

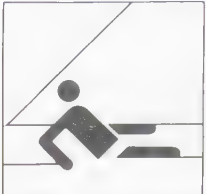
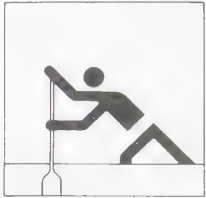
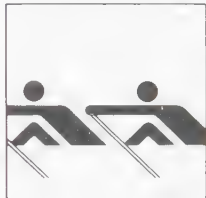


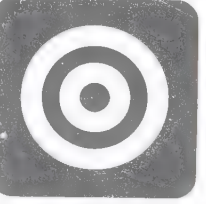
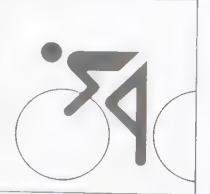
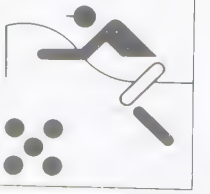
Wrestling



Fencing

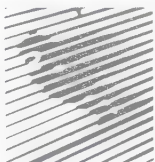
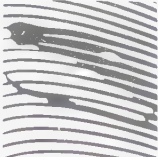
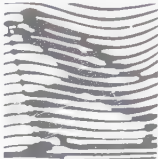
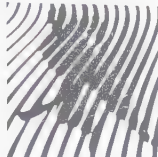
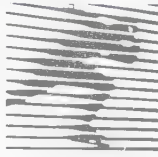
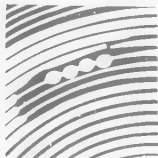
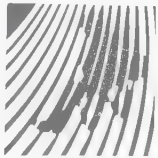


	1948	1964	1968	1972
Swimming				
Sailing				
Canoeing				
Rowing				
Water Polo				
Volleyball				
Basketball				

	1948	1964	1968	1972
Soccer				
Hockey				
Wall Contact Sports				
Shooting				
Cycling				
Equestrian				
Modern Pentathlon				

▲ Handball, Jai Alai, Squash, Tennis

● Equestrian, Fencing, Pistol Shooting, Swimming, Triathlon

Winter Olympics	 GIANT SLALOM	 OR  SLALOM	 OR  DOWN HILL SKIING
 OR  SKI JUMPING	 OR  CROSS-COUNTRY SKIING	 OR  BIATHLON	
 OR  ICE HOCKEY	 OR  SPEED SKATING	 OR  FIGURE SKATING	
 OR  BOBSLEIGH	 OR  LUGE		

SMOKEY IS ALIVE AND WELL

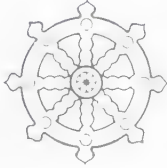
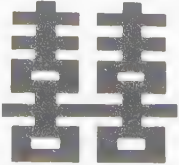
In 1950, high in the Lincoln National Forest of New Mexico, there was a tremendous fire. A fire fighter stumbled upon a badly singed and frightened little bear cub. The local Game Warden adopted the cub and he and his wife nursed it back to health. They called him Smokey.

The U.S. Forest Service selected Smokey as the national symbol for forest fire prevention. Shortly thereafter the United States Congress unanimously passed the Smokey Bear law to protect Smokey's name and character, and thus maintain his status.

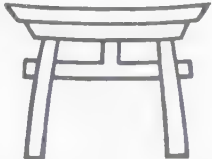
Today the original Smokey lives happily in Washington, D.C.'s National Zoological Park. He is never lonely, for he has four million visitors a year.



RELIGION

BUDDHISM Buddha 	BUDDHISM Buddha's Footprint 	BUDDHISM Lotus 
BUDDHISM Wheel of Law 	BUDDHISM, Tibetan The Path of Universality 	BUDDHISM, Zen Eternal State of Buddha 
CHRISTIANITY Latin Cross 	CHRISTIANITY Celtic Cross 	CHRISTIANITY Orthodox Cross 
CHRISTIANITY Christ Victorious 	CHRISTIANITY Chi Rho 	CHRISTIANITY Triquetra 
CHRISTIANITY The Fish 	CHRISTIANITY Agnus Dei 	CHRISTIANITY Descending Dove; Holy Spirit 
CHRISTIANITY Anchor; St. Clement 	CHRISTIANITY Ten Commandments 	CHRISTIANITY, Church of Christ, Scientist Cross and Crown 
CONFUCIANISM Confucius 	CONFUCIANISM Conjugal Bliss 	HINDUISM Mandala 

▲ The design of the Cross and Crown seal is a trademark of the Trustees under the Will of Mary Baker G. Eddy, registered in the United States and other countries. Used by permission.

HINDUISM Shiva 	HINDUISM Vishnu 	HINDUISM Aum; Brahman-Atman 
ISLAM Star and Crescent 	ISLAM Holy Qur-a'n 	JAINISM Brush and Bowl 
JUDAISM Star of David 	JUDAISM Menorah 	JUDAISM Ten Commandments 
SHINTO Torii 	SIKHISM Kirpan 	TAOISM Water; Life-giving Source 
TAOISM Yin-Yang 	ZOROASTRIANISM Sacred Fire 	

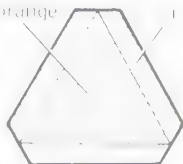
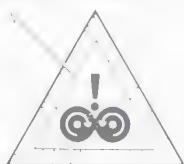
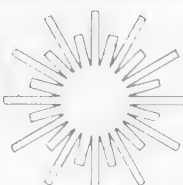


PALM SUNDAY

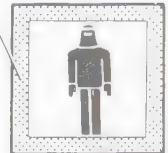
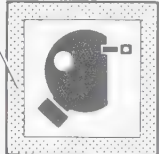
In Jerusalem, where the palm tree flourishes, Christ's triumphal entry was celebrated by the waving of palm fronds. Hence the Western world's traditional symbol for the Sunday before Easter. But in Russia where palms are scarce, the substitute symbol is *pussy-willow*!



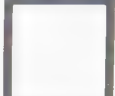
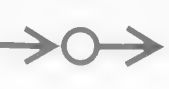
SAFETY

 LOOK OUT! (Safety Alert)	 FIRST AID	 NO ENTRY	 NO ENTRY to PEDESTRIANS	 EMERGENCY EXIT (Escape Route)	 FIRE ALARM
 ACCESS for the HANDICAPPED	 ACCESS for the AMBULANT	 KEEP AWAY from CHILDREN	 WATCH for WORK VEHICLES	 SLOW MOVING VEHICLE	 DO NOT START
 DO NOT TOUCH	 DO NOT LUBRICATE	 NO SITTING	 NO STANDING	 NO RIDING	 LADDER OFF LIMITS
 SLIPPERY	OR 	 OPEN PIT	 ELECTRICAL DANGER	OR 	 ELECTRIC FACILITIES
 SHARP	 MACHINERY HAZARD	 SUSPENDED LOAD OVERHEAD	 FALLING OBJECTS	 POISON	OR 
 CAUTION: LASER	CAUTION LASER				
 IONIZING RAYS (Radiation Warning)	OR 	 FALLOUT SHELTER (Civil Defense)	 BIOHAZARD WARNING		
 SMOKING PERMITTED	OR 	 NO SMOKING	OR 	OR 	OR 

ISO Recommendation

 NO OPEN FLAME PERMITTED	 FIRE PROTECTION EQUIPMENT	 DIRECTION for FIREMEN	 FIRE HOSE	 OR  DON'T EXTINGUISH with WATER	
 OR  FIRE EXTINGUISHER	 DO NOT PIERCE; KEEP from HEAT	 PROTECTION and SAFETY EQUIPMENT	 WEAR PROTECTIVE CLOTHES	 WEAR PROTECTIVE BELT	
 WEAR BOOTS	 OR  WEAR GLOVES	 WEAR EAR PROTECTION (Noise)	 OR  WEAR GOGGLES		
 OR  WEAR GAS MASK	 OR  WEAR HELMET	Ground-Air Emergency Code ▲		 ALL WELL	
 REQUIRE DOCTOR (Serious Injuries)	 REQUIRE MEDICAL SUPPLIES	 UNABLE to PROCEED	 AM PROCEEDING in this DIRECTION	 INDICATE DIREC- TION and PROCEED	 PROBABLY SAFE to LAND HERE
 WILL ATTEMPT to TAKE OFF	 AIRCRAFT BADLY DAMAGED	 ENGINEER REQUIRED	 FUEL and OIL REQUIRED	 COMPASS and MAP REQUIRED	 SIGNAL LAMP REQUIRED
 FIREARMS and ammunition required	 FOOD and WATER REQUIRED	 YES	 NO	 NOT UNDERSTOOD	

▲ Symbols may be made of strips of fabric or parachutes, pieces of wood, tree branches, stones or any other available material

Traffic Accidents	 MATERIAL DAMAGE	 INJURY, NON-FATAL	 INJURY, FATAL	 PARKED BUS, TRUCK, or TRACTOR	 OTHER OBJECTS
 INTENDED MOVEMENT	 MOVING CAR, VAN or MOTORCYCLE	 STOPPED CAR, VAN or MOTORCYCLE	 MOVING BUS, TRUCK or TRACTOR	 STOPPED BUS, TRUCK or TRACTOR	 TOWED and TOWING VEHICLE
 HEAVY TRUCK and TRAILER	 REVERSING	 OUT of CONTROL	 SKIDDING	 VEHICLE OVERTURNED	 COLLISION, BROADSIDE
 COLLISION, OVERTAKING TURN	 COLLISION, TURN	 COLLISION, HEAD-ON	 COLLISION, REAR END	 SIDESWIPE, HEAD-ON	 SIDESWIPE, OVERTAKING

- ▲ Solid line drawing () indicates Parked Car, Van, or Motorcycle
- A letter P above arrow indicates Pedestrian, A, Animal, PC, Pedal Cycle
- ★ A letter A above arrow indicates Animal drawn Vehicle

BEFORE ABC'S

Youngsters below reading age can be protected by graphic symbols.



Caution: Sharp

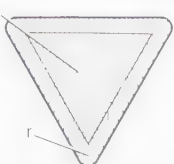
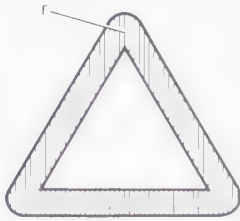
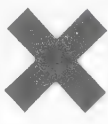
In the framework of traffic signs for "grown-ups" that sanction or forbid, various do's and don'ts are quickly recognized and remembered by children.

The importance of symbols in context was never more clearly shown than when we ran a specially designed test at a nursery school. A drawing of the skull and crossbones was displayed to a group of three-year-olds. "PIRATES!" they screamed. But when I drew the outline of a bottle around the symbol, they immediately shouted "POISON!"

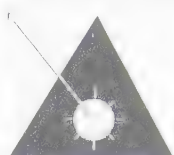
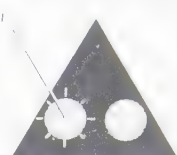
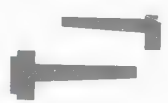


Forbid: Hot

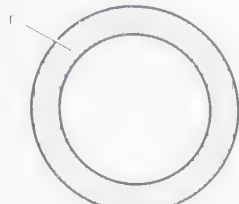
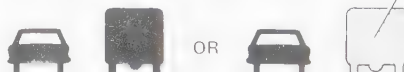


 r			OR	 r			OR	 r, b			OR	 b, r			OR	 r			 r, b																		
STOP																NO STOPPING																					
 r												OR	 y																								
WARNING, DANGER, CAUTION																																					
																		SIDE ROAD																			
																																					
																		MERGING TRAFFIC																			
A specific Warning is indicated by placing any of the following symbols within these shapes. The inner symbol may be either black or dark blue.																								OR													
												INTERSECTION; CROSSROADS																									
																																					
STAGGERED JUNCTION						"Y" JUNCTION						LEFT BEND						RIGHT BEND						DOUBLE BEND, LEFT						DOUBLE BEND, RIGHT							
																		OR													OR						
HAIRPIN BEND						SERIES of BENDS						ROAD NARROWS												DIVIDED ROAD ENDS													
																																					
DIVIDED ROAD BEGINS						PASS EITHER SIDE						TWO-WAY TRAFFIC						2-WAY TRAFFIC across 1-Way Street						TRAFFIC CIRCLE (Roundabout) AHEAD						HUMP BRIDGE							
												OR							OR																		
BUMP						ROUGH or BUMPY ROAD																		DIP						DRIFT							

▲ "STOP" often translated into language of country.

 OR 	 OR 	 Blinking Light OR  Alternately Blinking Lights			
 OR 	 OR 				
					
					
			 OR 		
 OR 					
 OR 					

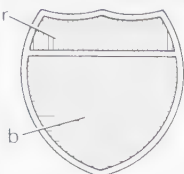
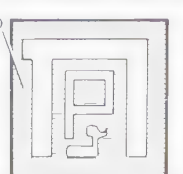
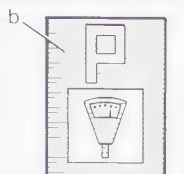
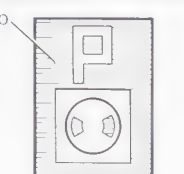
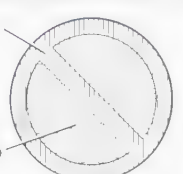
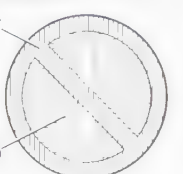
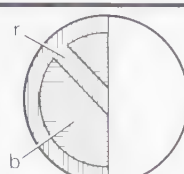
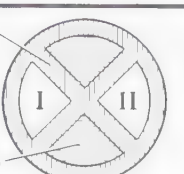
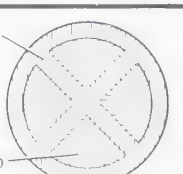
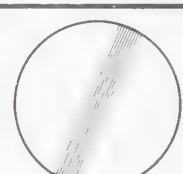
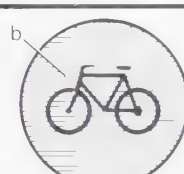
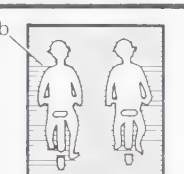
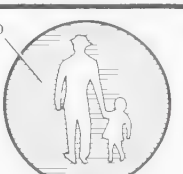
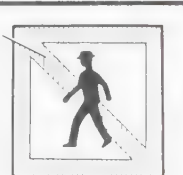
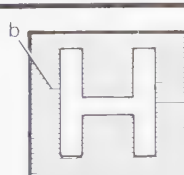
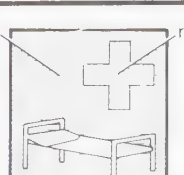
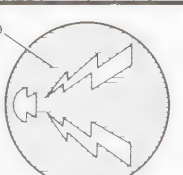
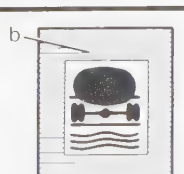
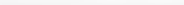
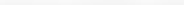
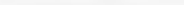
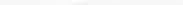
▲ Amount of grade may also be expressed as a ratio. Example: 1:10

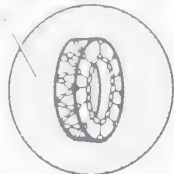
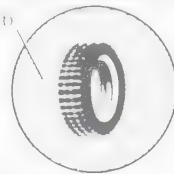
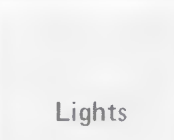
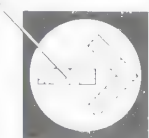
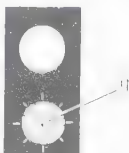
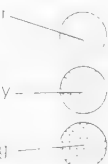
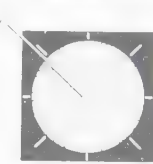
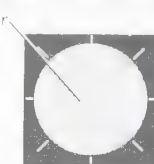
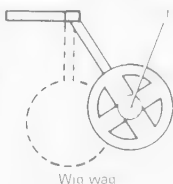
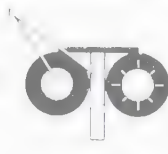
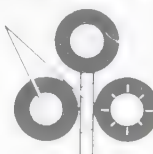
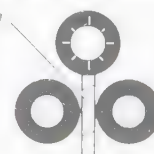
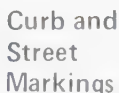
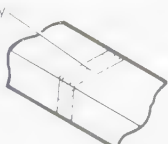
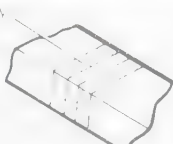
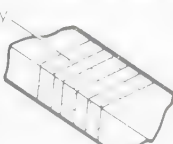
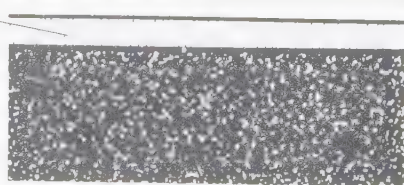
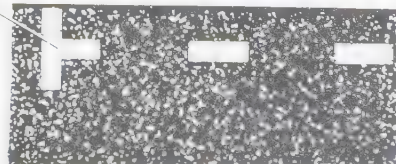
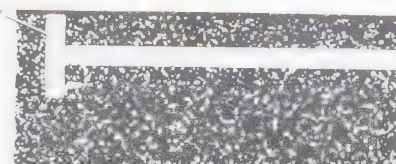
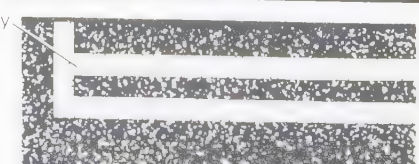
 RESTRICTION		 PROHIBITION		 NO ENTRY (All Vehicles)	 NO RIGHT TURN	 NO "U" TURNS
A specific Restriction or Prohibition is indicated by placing any of the following symbols within these shapes. The inner symbol either black or dark blue.				 NO CROSSING by VEHICLES	 NO LANE CHANGING	 PRIORITY for oncoming traffic
 NO PASSING				 KEEP RIGHT		 NO PASSING by GOODS VEHICLES
 STOP for Light Vehicles (except Bicycles)	 NO HANDCARTS	 NO BICYCLES	 NO MOPEDS	 NO MOTORCYCLES	 NO RIDING DOUBLE on MOTORCYCLE	
 NO ANIMAL-DRAWN VEHICLES	 NO MOTOR VEHICLES	 NO MOTOR VEHICLES (any kind)	 NO ENTRY, BUS	 NO ENTRY, GOODS VEHICLE	 NO ENTRY, Motor Vehicle with Trailer	
 NO ENTRY, Motor or Animal-drawn Vehicles	 MAXIMUM SPEED LIMIT	 NO ENTRY, Vehicle exceeding WIDTH	 NO ENTRY, Vehicle exceeding HEIGHT	 MAXIMUM WEIGHT on AXLE	 NO ENTRY, Vehicle exceeding LENGTH	
 LOW BEAM LIGHTS ONLY	 DIM LIGHTS	 NO HORN BLOWING	 COMPULSORY STOP	 POLICE and INSPECTION	 PEDESTRIANS KEEP LEFT	

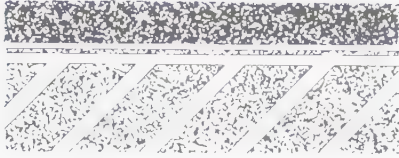
▲ Exception: Two wheeled motor vehicles without side-cars.

● Other reasons for stopping may be indicated. Example: STOP - CHILDREN; STOP - WEIGHT CHECK.

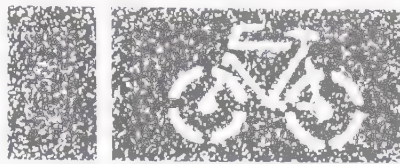
Information and Direction	</
--------------------------------------	--

 ROUTE MARKER, INTERSTATE	 ROUTE MARKER, ASSEMBLY	 ROUTE MARKER, U. S. (State)	 OR  PARKING	 PARKING OFF ROAD	
 METERED PARKING	 PARKING DISC COMPULSORY	 OR  NO PARKING	 NO PARKING on ODD DATES	 NO PARKING on EVEN DATES	
 NO PARKING on LEFT	 NO PARKING on RIGHT	 NO PARKING (Odd days, Left; Even, Right)	 NO STOPPING	 OR  END of PROHIBITION	
 COMPULSORY BICYCLE TRAIL	 PARALLEL Riding Permitted	 UNDERPASS or BRIDGE	 COMPULSORY WAY for PEDESTRIANS	 OR  PEDESTRIAN CROSSING	
 CHILDREN CROSSING	 CHILDREN CAN PLAY in STREET	 NO PEDESTRIAN CROSSING	 NO PEDESTRIANS	 SAFETY ISLAND	 BRIDLE PATH
 OR  HOSPITAL	 OR  HOSPITAL	 SOUND HORN	 PARKING LIGHTS Required at NIGHT	 STOP and CHECK BRAKES	
 DON'T POLLUTE WATER	 TRAMWAY STOP	 OR  BUS STOP or STATION	 FERRY	 FIRE AREA (Potential)	

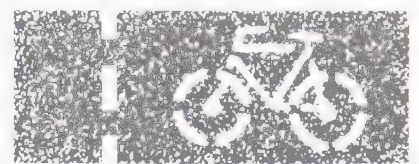
					
DANGER from AVALANCHES	SNOW	TIRE CHAINS REQUIRED	SNOW TIRES REQUIRED	FILLING STATION	EMERGENCY ROAD SERVICE
					
YOUTH HOSTEL	TRAILER SITE	CAMPING SITE	Lights	CHANGE to LANE with GREEN ARROW	LANE may be FOLLOWED
			OR 		OR 
STOP	CAUTION: Red Light Soon	PEDESTRIANS MAY CROSS	OR	PEDESTRIANS MUST WAIT	OR
	OR 	OR 			
TRAFFIC SIGNALS			DANGER POINT; BE CAREFUL	STOP: BRIDGE OPENING	PROCEED in Direction of Arrow
	OR 	OR 	OR 		
STOP: TRAIN COMING	OR	OR	OR	NO TRAIN COMING	
					
Curb and Street Markings	NO LOADING (less than working day)	NO LOADING (working day)	NO LOADING (more than working day)	NO WAITING	
					
NO PARKING (less than working day)	NO PARKING (working day)	NO PARKING (more than working day)			



PAVED SHOULDERS

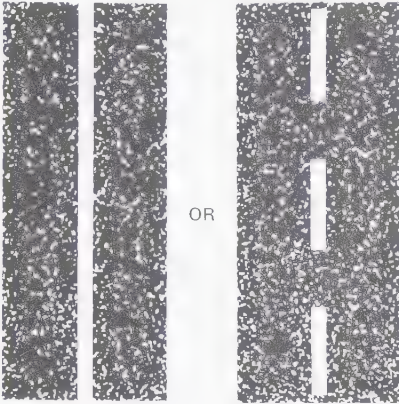


CYCLING LANE



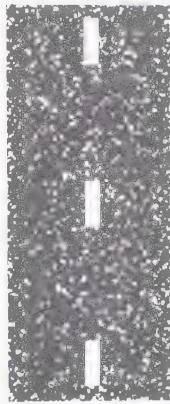
OR

Motor Vehicles Permitted

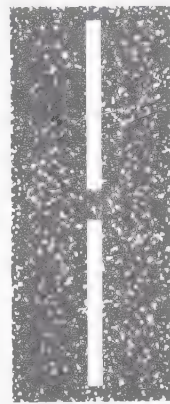


OR

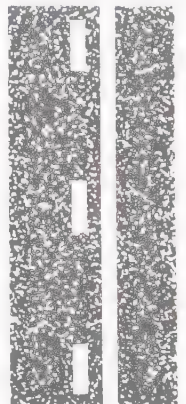
CENTER LINE



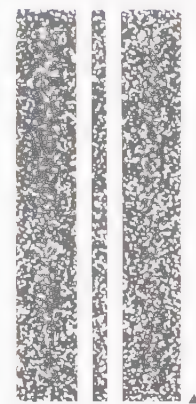
LANE LINE



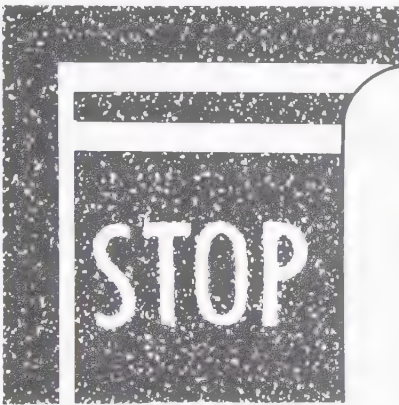
WARNING LINE



NO CROSSING if
solid line on your side



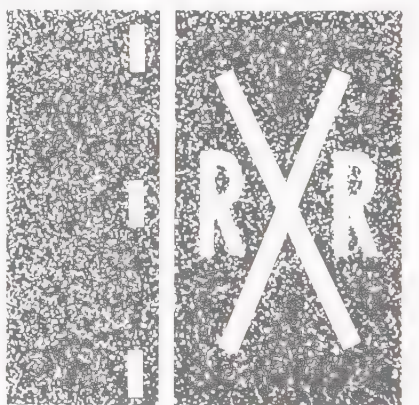
NO CROSSING
(either side)



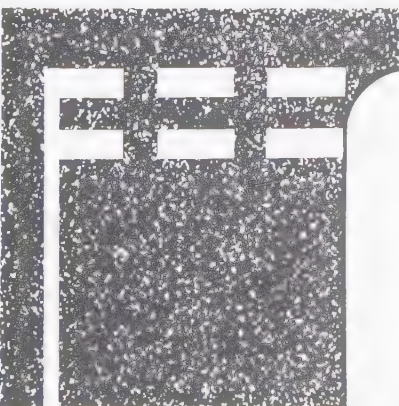
STOP Controlled by Sign



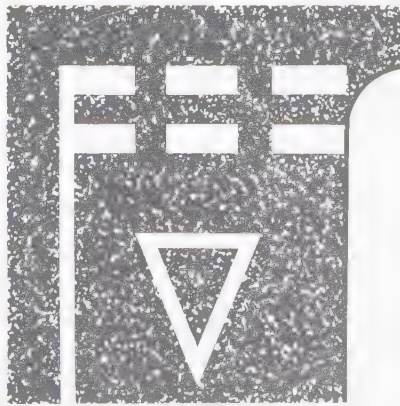
STOP Controlled by Traffic Signal



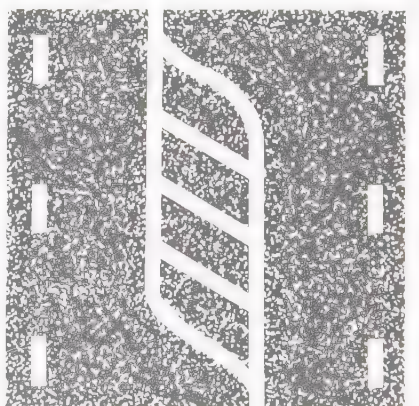
RAILROAD CROSSING



YIELD Controlled without Sign

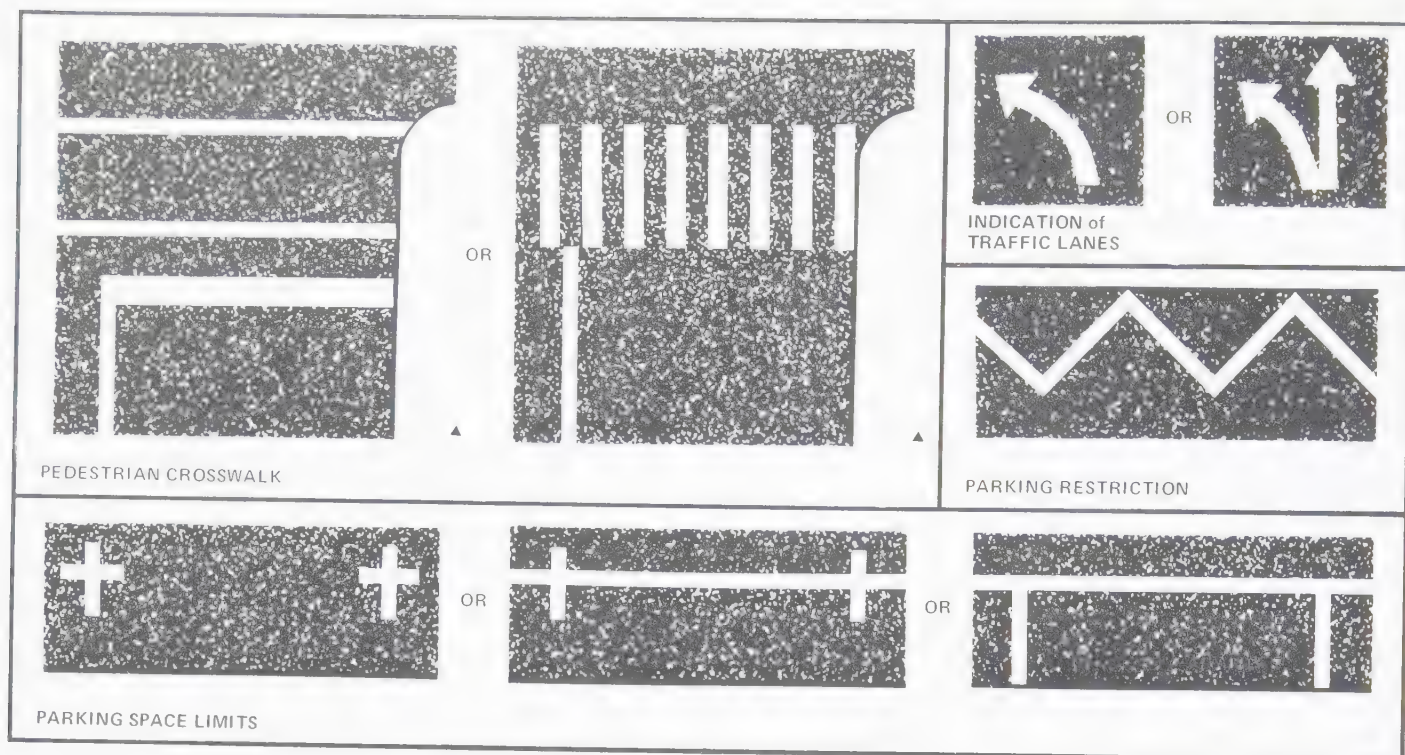


YIELD Controlled with Sign



DO NOT ENTER MARKED AREA

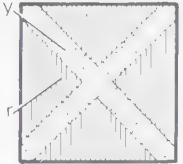
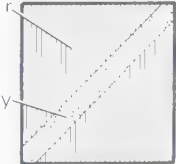
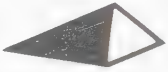
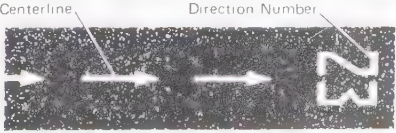
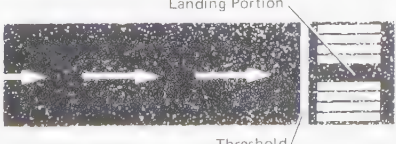
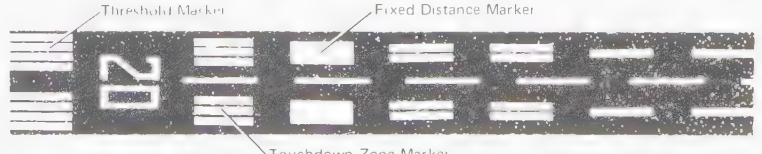
▲ Solid Line(s) may also be shown in yellow.

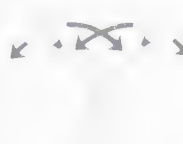
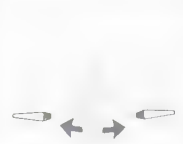
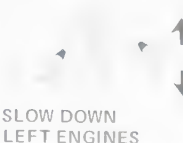


Air

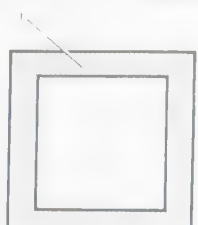
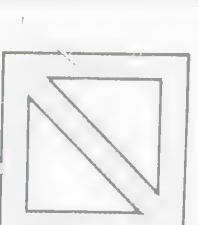
CLIMB and MAINTAIN	DESCEND and MAINTAIN	CRUISE	ABEAM (Abreast)	ABOVE	BELOW
REVERSE COURSE	REVERSE COURSE to LEFT	REVERSE COURSE to RIGHT	WHILE in controlled airspace	JOIN AIRWAY, jet route or course	CROSS AIRWAY, jet route or course
BEFORE	AFTER	NO DELAY EXPECTED	AFTER; AFTER PASSING	AIRCRAFT at ASSIGNED ALTITUDE	ALTERNATE INSTRUCTIONS

▲ Solid Line(s) may also be shown in yellow.

					
CLEARED to ENTER CONTROL AREA	WHILE in CONTROL AREA	CLEARED to LEAVE CONTROL AREA	ENTER CONTROL ZONE	THROUGH CONTROL ZONE	LEAVE CONTROL ZONE
					
CLIMB in HOLDING PATTERN	DESCEND in HOLDING PATTERN	INFORMATION FORWARDED	1000 FEET (Min.) above WEATHER	PILOT CANCELLED FLIGHT PLAN	DIRECT
					
MAINTAIN	PROCEED	TAKE-OFF	CROSS	WHILE in CONTROL ZONE	AIR TRAFFIC Services report office
				 OR 	
NO LANDING	OBSERVE LANDING PRECAUTIONS	USE RUNWAYS and TAXIWAYS ONLY	LAND and TAKE-OFF on RUNWAYS ONLY	LANDING or TAKE- OFF DIRECTION	
					
TURN RIGHT, before landing, after take-off	UNFIT for Aircraft Movement	GLIDER FLIGHTS in OPERATION	PUBLIC HELIPORT	PRIVATE HELIPORT	HOSPITAL HELIPORT
					
BASIC RUNWAY			DECEPTIVE AREA (Use only for taxiing)		
					
INSTRUMENT RUNWAY			ALL-WEATHER RUNWAY		

Marshalling Signals	 PROCEED; WATCH SIGNALS	 THIS WAY	 PROCEED to NEXT SIGNALMAN	 TURN LEFT	 TURN RIGHT
	 MOVE AHEAD	 STOP	 START ENGINES	 INSERT CHOCKS	 PULL CHOCKS
	 SLOW DOWN	 SLOW DOWN LEFT ENGINES	 SLOW DOWN RIGHT ENGINES	 MOVE BACK	 BACK UP, Tail to STARBOARD
	 ALL CLEAR	 HOVER	 MOVE UPWARDS	 MOVE DOWNWARDS	 MOVE HORIZONTALLY
	 LAND				

Marine

 PERMISSION	 RESTRICTION	 PROHIBITION	 OBLIGATION to STOP	 KEEP SHARP LOOKOUT	 SOUND HORN
A specific Permission, Restriction or Prohibition is indicated by placing any of the following symbols within these shapes. The inner symbol is white in blue square; black in red squares.			 PROCEED in this DIRECTION	 MOVE to port side of channel	 MOVE to starboard side of channel

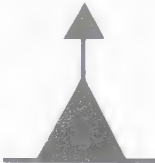
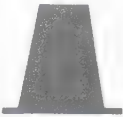
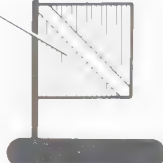
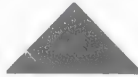
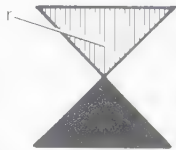
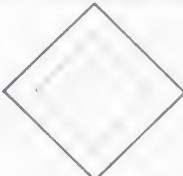
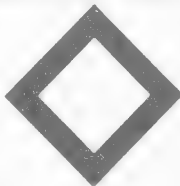
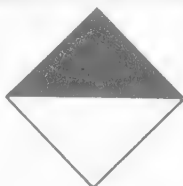
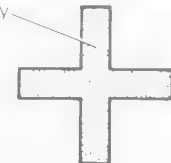
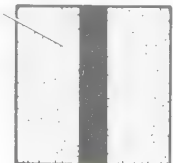
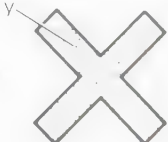
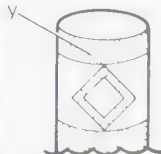
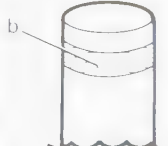
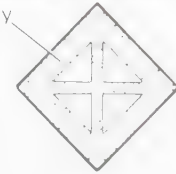
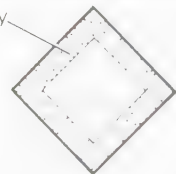
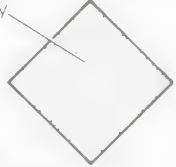
- ▲ The signalman is shown facing the aircraft. Signals may also be made with illuminated wands, bats or torchlights.
- The speed of the signalman's arm movement indicates the speed of the action to be taken by the pilot.

CROSS CHANNEL to PORT	CROSS CHANNEL to STARBOARD	KEEP to PORT side of channel	KEEP to STARBOARD side of channel	NO PASSING or OVERTAKING	ABSOLUTELY NO OVERTAKING
NO OVERTAKING of Convoys by Convoys	CROSSING larger waterway	ENTERING larger waterway	CROSSING TRIBUTARY	ENTRANCE of TRIBUTARY	TURNING BASIN (Put About)
LIMITED DEPTH	LIMITED HEADROOM	LIMITED CHANNEL WIDTH	TRUE CHANNEL Distance from Bank	DON'T CAUSE WASH	END of PROHIBITION
MAXIMUM SPEED	WEIR	CAPTIVE (Private) FERRY	DRINKING WATER SUPPLY	TELEPHONE	OVERHEAD CABLE CROSSING
			Storm Warnings	OR Day Night	
WAITING	ANCHORING	MOORING		SMALL CRAFT (38 mph Winds)	
OR Day Night		OR Day Night		OR Day Night	
GALE (39 to 54 mph Winds)		STORM (55 to 73 mph Winds)		HURRICANE (74 and up mph Winds)	
 CAN		OR STARBOARD Limits of CHANNEL		OR MID-CHANNEL	

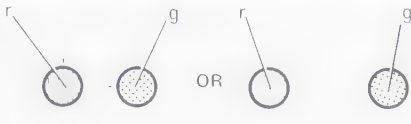
▲ May be any prescribed kilometers per hour.

● Anchor inverted when used in Prohibition square.

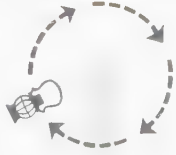
★ Color of buoy structure indicates location of channel: black for port side; black and white, mid-channel; red, starboard. Numbers may also be added: odd for port side; none, mid-channel; even, starboard.

 OR  PORT LIMITS of CHANNEL	 NUN	 SPAR	 BELL	 WHISTLE		
 LIGHTED	 OR  Spheres CHANNEL is CLEAR	 OR  Sphere CHANNEL is not CLEAR	 DIVER'S FLAG			
 OR  DANGER POINT on LEFT BANK	 OR  DANGER POINT on RIGHT BANK	 OR  DANGER POINT in MID-CHANNEL				
 OR  OR  POSITION of Channel from Left Bank	 OR  OR  POSITION of Channel from Right Bank					
 OR  OR  CROSS-CHANNEL FAIRWAY, Left Bank	 OR  OR  CROSS-CHANNEL FAIRWAY, Right Bank					
 SPECIAL REGULATIONS	 MOORING BUOY	 NO PASSING between HERE and SHORE	 BOATS KEEP OUT	 DANGER	 CONTROLLED AREA	
 PROHIBITED CHANNEL	 AUTHORIZED CHANNEL	 RECOMMENDED CHANNEL	Lights		 NO PASSAGE	 PROLONGED HALT to NAVIGATION

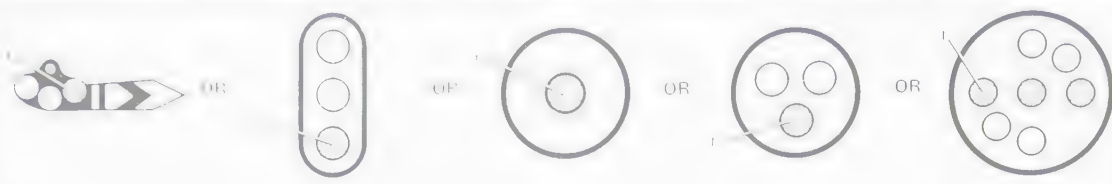
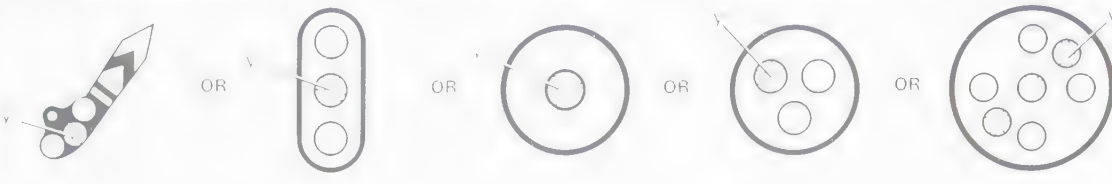
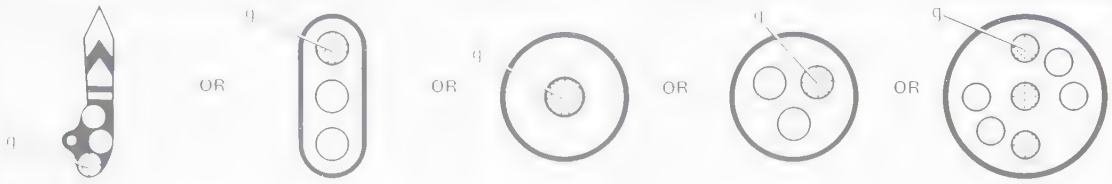
- ▲ Color of buoy structure indicates location of channel: black for port side; black and white, mid-channel; red, starboard. Numbers may also be added: odd for port side, none, mid channel; even, starboard.
- Specific danger may be indicated inside. Example: Wreck, Shoal, Dam

					
NO PASSAGE between the LIGHTS	STOP; STAND BY to PROCEED		GO AHEAD		
					
GO AHEAD with CAUTION	GO AHEAD; No Opposite Traffic	DON'T CAUSE WASH	OBSTACLE, pass by Double Light	OBSTACLE, pass either side	STEER TOWARDS Intermittent Light
Nautical Charts			 OR 		
	POSITION of BUOY	POSITION of LIGHT			BUOY
					
LIGHT BUOY	VERTICAL STRIPS	DIAGONAL BANDS	CHECKERED BUOY	BUOY with TOPMARK	FISH TRAP AREA BUOY
				 OR 	
PORT-HAND BUOY (Entering from Seaward)	MOORING BUOY	FIXED BEACON	BLACK BEACON	PRIVATE AID for NAVIGATION	

Rail

					
PROCEED	REDUCE SPEED	STOP	BACK	APPLY AIR BRAKES	RELEASE AIR BRAKES

▲ Words or initials are often used with symbol to identify a specific type of buoy. Example:  C means Can Buoy,  BELL, Bell Buoy.

 STOP	 SPEED LIMIT
 APPROACH	 STATION WARNING
 PROCEED	 WHISTLE POST

▲ Top number is for Passenger Train; bottom, Freight Train

KNIGHTS OF THE ROAD

Nonchalant and carefree as they may appear, the hoboes are sufficiently sophisticated to have produced a system of graphic symbols all their own. What is more, it is international, and gypsies around the world can translate it into their mother tongues.

If you should come upon a country wall and find this message chalked on it, could *you* read it?



No use going
in this
direction.



This way.



Kind lady
lives here.



If you work,
she will feed
you.



You can sleep
in hayloft.



If sick, they'll
care for you.

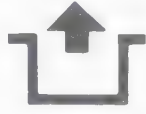
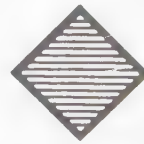


Be careful.



Vicious dog
here.

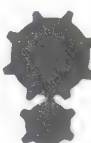
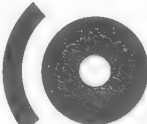
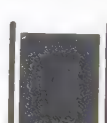
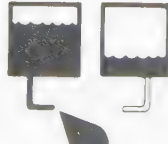
VEHICLE CONTROLS

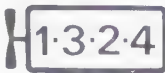
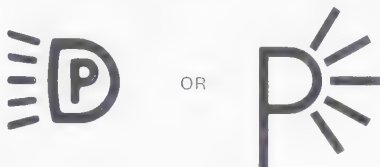
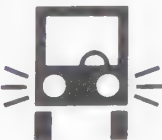
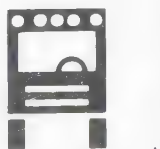
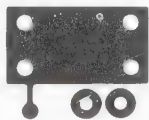
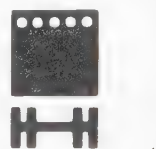
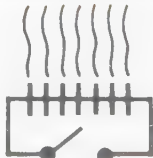
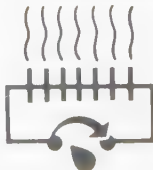
					
ON	OFF	FAST	SLOW	FORWARD	REVERSE
					
UP; RAISE	DOWN; LOWER	TURN LEFT (Signal)	TURN RIGHT (Signal)	ROTATE, CLOCKWISE	ROTATE, COUNTER- CLOCKWISE
	OR 		OR 		
ENGAGE; IN	DISENGAGE; OUT		LOCK; TIGHTEN	UNLOCK; LOOSEN	
		OR 			
DIRECTION of CONTROL LEVER	WATER		COOLANT	AIR PRESSURE	COMPRESSED GAS
	OR 				
CAUTION: PRES- SURIZED RADIATOR		CLEARANCE	HIGH LEVEL	LOW LEVEL	FLOAT (Hydraulic Lift)
					
HEAVY----LIGHT (Weight)	TIME (in hours)	TEMPERATURE	TEMPERATURE, WATER	FILTER	FILTER, AIR
		OR 			
ENGINE SPEED (in RPM)	ENGINE with JACOBS BRAKE		ENGINE OIL	ENGINE OIL PRESSURE	ENGINE HOURS (Running Time)

▲ Any vehicle, correctly oriented to arrow, may be used.

● May be used in conjunction with other symbols to designate lever motion.

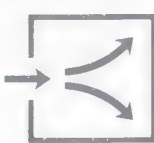
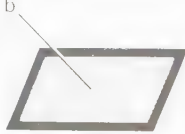
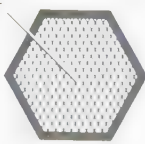
VEHICLE CONTROLS *(continued)*

					
CLUTCH ENGAGED	CLUTCH DISENGAGED	TRANSMISSION	TRANSMISSION OIL	TRANSMISSION OIL FILTER	TRANSMISSION OIL PRESSURE
		OR 			
TRANSMISSION OIL TEMPERATURE	NEUTRAL		DRIVE	HIGH-RATIO GEAR	FRONT-WHEEL DRIVE
		 OR 			
TOW	PARK	BRAKE		BRAKE OIL	BRAKE OIL PRESSURE
			 OR 		
HAND BRAKE ENGAGED	HAND BRAKE DISENGAGED	HYDRAULIC RESERVOIR	FUEL		DIESEL FUEL
			OR 	OR 	
FUEL SHUT-OFF	PRIMER PUMP	CHOKE			HAND THROTTLE
 OR 		 OR 		 OR 	
EMPTY		HALF FULL		FULL	
					
FUEL TANK SELECTOR		IGNITION SWITCH		IGNITION ON	SPARK ADVANCE
					
				HEATER, STARTER	

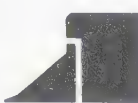
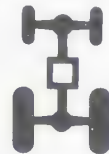
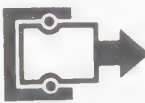
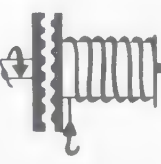
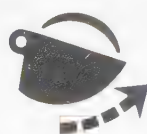
					
STARTER		FIRING ORDER	AMMETER, GENERATOR		BATTERY SLAVE
					
POWER ON (Accessories)		ALL POWER OFF	EMERGENCY ENGINE STOP	MAIN LIGHT SWITCH	HEAD LIGHTS, BRIGHT
					
PARKING LIGHTS		WORK LIGHT	FOG LIGHT	PASSING LIGHT	ROTATING LIGHT (Emergency Vehicle)
					
INSTRUMENT PANEL LIGHT		BLACKOUT HEADLIGHTS	BLACKOUT CLEAR- ANCE LIGHTS	EMERGENCY (or HAZARD) FLASHER	
					
INTERIOR LIGHT		HEADLIGHTS, tractor	FRONT RUNNING LIGHTS, tractor	SIDE RUNNING LIGHTS, trailer	REAR RUNNING LIGHTS, trailer
					
CIGARETTE LIGHTER		HORN	TWO TONE HORN	RADIO	RADIO (On-Off-Volume)
					
RADIO STATION SELECTOR		AIR CONDITIONING	HEATER	HEATER (On-Off)	HEATER REGULATOR
					FLOOR HEAT

▲ Applies to semi tractor-trailer (truck)

VEHICLE CONTROLS *(continued)*

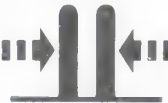
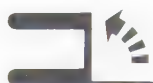
		 OR 	 OR 		
TEMPERATURE, HOT	TEMPERATURE, COLD	HEATING	COOLING		
			 OR 		
VENTILATING FAN	CIRCULATING INSIDE AIR	CIRCULATING OUTSIDE AIR	WINDOWS, UP and DOWN	SLIDING ROOF	
 OR 					
WINDSHIELD WIPER	WINDSHIELD WASHER	WINDSHIELD WIPER / WASHER	WINDSHIELD DEFROSTER	HOOD RELEASE	
		Lubrication			
DAY POSITION (Rear View Mirror)	NIGHT POSITION (Rear View Mirror)			DIPSTICK	OIL
					
ADD SAE 90 multipurpose gear oil ▲	GREASE	LUBRICATE with Multipurpose Grease ▲	BRUSH with multipurpose grease ▲	PACK with multipurpose grease ▲	Molybdenum-Disulfide Grease every 100 hours
					
LUBRICATE every 5 hours	LUBRICATE every 10 hours	LUBRICATE every 50 hours	LUBRICATE every 100 hours	LUBRICATE every 250 hours	LUBRICATE every 500 hours
		Agriculture			
LUBRICATE every 1000 hours	LUBRICATE every 2000 hours			GROUND SPEED	ALL MECHANISMS
					HEADER

- ▲ Number refers to frequency of lubrication (in hours).
● Applies to combines.

 PLATFORM HEIGHT ▲	 CONCAVE ADJUSTMENT ▲		 REEL SPEED ▲	 CUTTER BAR	
 COTTON PICKING UNIT	 COTTON PICKING UNIT LIFT, UP	 COTTON PICKING UNIT LIFT, DOWN	 COTTON BLOWING FAN	Industrial	 DIFFERENTIAL LOCK
 AXLE, CONNECT	 AXLE, DISCONNECT	 POWER TAKE-OFF (PTO), ON	 POWER TAKE-OFF (PTO), OFF	 GEAR BOX	 QUICK-RELEASE COUPLER
 WINCH	 WINCH PTO ENGAGED	 WINCH PTO DISENGAGED	 WINCH BRAKE	 ROCKSHAFT RAISED	 ROCKSHAFT LOWERED
 REMOTE CYLINDER EXTENDED	 REMOTE CYLINDER RETRACTED	 LOADER BOOM RAISED	 LOADER BOOM LOWERED	 HOIST RAISED	 HOIST LOWERED
 LOADER BUCKET, ROLL BACK	 LOADER BUCKET, DUMP	 BASKET LIFT, UP	 BASKET LIFT, DOWN	 UPENDER, UP	 UPENDER, DOWN
 CONVEYOR	 UNLOADING AUGER		 TORQUE CONVERTER	 SAFETY VALVE	 SHEAR PIN

- ▲ Applies to combines.
- Applies to fork lift vehicles.

VEHICLE CONTROLS *(continued)*

					
LIFT, RAISED	LIFT, LOWERED	TILT, REARWARD	TILT, FORWARD	REACH, RETRACT	REACH, EXTEND
					
SIDESHIFT, RIGHT	SIDESHIFT, LEFT	FORK SPREAD, CLOSE	FORK SPREAD, OPEN	SWING (or PIVOT) RIGHT	SWING (or PIVOT) LEFT
					
LOAD STABILIZER, RELEASE	LOAD STABILIZER, CLAMP	PULL	PUSH	CLAMP, CLOSE	CLAMP, RELEASE
					
LEFT STABILIZER, UP	LEFT STABILIZER, DOWN	RIGHT STABILIZER, UP	RIGHT STABILIZER, DOWN		

▲ Applies to fork lift vehicles.

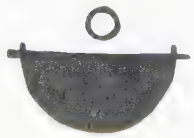
ALERT



Light



Moderate



Heavy

While arranging the meteorology symbols we came upon one listed as "visibility reduced by smoke." We suggested a synonym: SMOG. But our consultant at the National Weather Service told us that the two terms are not synonymous and that no symbol for smog exists.

It seemed absurd to have no graphic symbol for so prevalent and dangerous a nuisance. So, we went to Dr. Arie Haagen-Smit, that eminent authority who served as Chairman of the President's Task Force on Air Pollution and is known as Mr. Smog-control himself.

Over a lunch table this symbol was developed.

It represents a valley or basin that holds varying degrees of pollutants caused by the effects of the sun, and suspended in the atmosphere.

Would simply a skull and crossbones be more appropriate?

Three-dimensional shapes also can serve as *touch symbols*. Like two-dimensional graphics, they may be visual symbols, often reinforced by color differentiation — but more importantly, they can also be recognized by touch instead of sight.

The U.S. Air Force uses shape codes on its complex of aircraft mechanisms. Thus a pilot whose eyes are needed to guide his plane quickly learns the function indicated by each shape and can delegate vital controls to his fingers. The U.S. Army and Navy also make use of shape codes for controls on vehicles and radar equipment, but each has its own individual system.

The farmer, confronted by a multitude of levers, knobs, and buttons, yet needing to keep his eye on the furrow, finds an essential safety factor in being able to recognize by *feel* the shape of each control.

How unfortunate that we have no standard system which would permit *any* user of *any* piece of equipment — be it kitchen range or helicopter — to know beyond a doubt, that a particular shape always serves the same particular function.

But even before we achieve this utopia, it should not be too much to hope that in the interest of *safety*, all airplanes, all automobiles, and all farm and industrial equipment will be fitted with identical controls for identical functions. This must and will be accomplished through the efforts of manufacturing associations and national and international standards organizations, with the cooperation of government agencies.

Standardization will then have conquered confusion in an area vital to us all.

VEHICLE CONTROLS

Agriculture



Seat Adjust



Gearshift



Platform Lift; Reel Lift

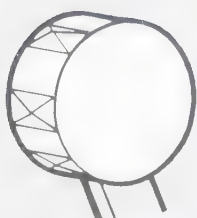


Throttle

Aircraft



Supercharger



Mixture

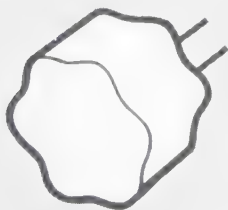


Power (Throttle)

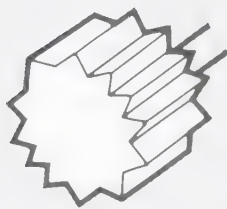


Landing Gear

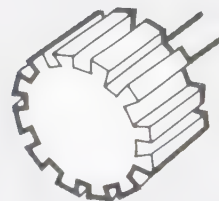
Army Vehicle



Fuel System

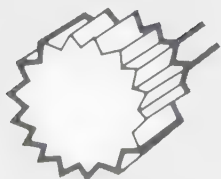


Lighting System



Power Train

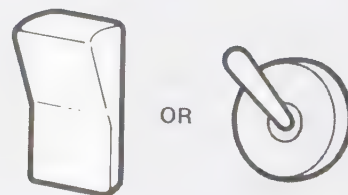
Automotive



Finger-operated,
continuous, multi-turn

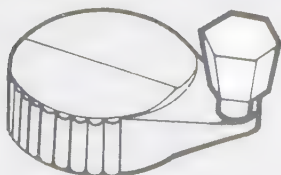


Detented
(more than 2 steps)



2-Position
(discrete switching only)

Navy Radar



Bearing



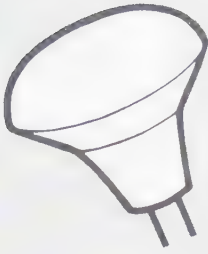
Tuning



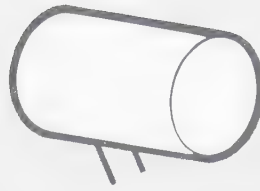
Gain



Dimmer



Auger



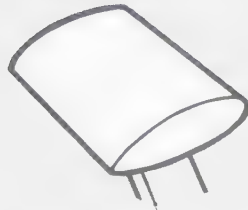
Ground Speed



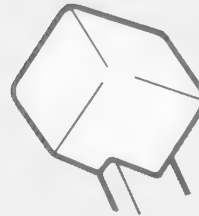
Separator;
Ratchet



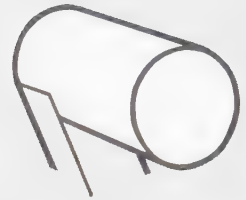
RPM



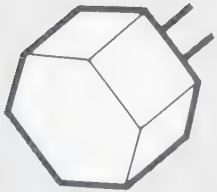
Landing Flap



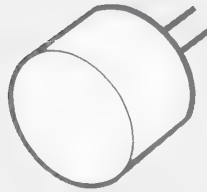
Carburetor Air



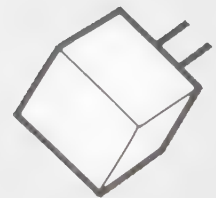
Reverse Power



Special Purpose
Equipment



Ignition System



Accessory Equipment



Finger-operated,
very light force



Push/Pull,
heavy force



Slide Action,
light force



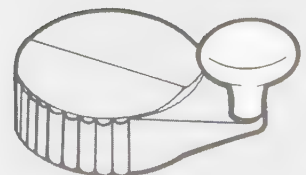
Intensity



Focus



Range



Marker

GRAPHIC FORM SECTION

This section permits identification of symbols out of context. It also establishes the meanings of a given graphic form, and directs to the appropriate Discipline by page number. So it serves as a visual reference for the designer of a new symbol and provides a basis of comparison for standardization.

No computer or other mechanical or exact parameters could be used to define how a designer might see various forms. The overall classification and arrangement of the symbols is therefore of necessity a purely personal judgment, based only on an individual "eye" for the determination of graphic form.

GROUPING of SYMBOLS — is by *form only*, without regard to meaning. We have extracted from the Discipline section those symbols which lend themselves to classification by the Key Form system we established.

Key Forms in the page margin introduce each major classification and sub-classification, arranged in a consistent pattern. Within each grouping, the symbols are sequenced from simple to complex.



When a symbol is composed of several distinct forms, the complete symbol or its individual components are entered under each classification. However, when one form is clearly subordinated to another, only the major form is entered.

TEXT — Often the same graphic form has different meanings in different Disciplines. In these cases, all such meanings are listed with the symbol, each with its reference page number.

When two or more symbols are basically similar in graphic form, differing only in relative size, line weight, or modification of their graphic components, we have illustrated only *one typical symbol* and have established the following guide:

- v following a page number (for example, 143v) indicates a *graphic variation* of the illustrated symbol.
- + following a page number (for example, 154+) indicates that *additional* symbols, with *closely related meanings* (not listed) and similar graphic form, appear on the same page, usually adjacent to one another.

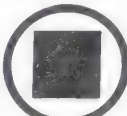
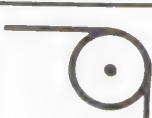




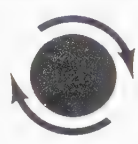
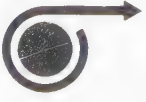
		Can Be Dry Cleaned, 101 Pole, Electric Distribution, 49 Light Outlet Ceiling, 49 Water Heater, 50 Use, 51 Full Moon, 54 Female, 55	Atomic s Orbital, 68 Attend To Obvious Fault, 73 v Pressure, 81 Circularity (Roundness), 85 Weld All Around, 85 Alum, 87 Nothing to be Gained Here, 90 v	Village, 92 + Water Well, 96 Temporary Water, 93 Stop; Off 107 Cylinder Oils B, C, and D, 108 Clear Sky, 121 Still, 126	Buddhism, Zen, Eternal State of Buddha, 138 v Injury, Non-Fatal, 142 Information Forwarded, 151 Private Aid for Navigation, 155 Off, 157	 Restriction, 145 No Vehicles, 146 v
		Lubricate every 10 hours, 160 College, University, 95 Emergency Stop, Master Stop, 107 Daily Lubrication, 109 Most Difficult Ski Run, 132		Galactic Cluster, 54 Existing Trees Removed, 51 v Neutral, 158 v		Traffic Circle Ahead, 143 Circulating Inside Air, 160 v Traffic Circle, Compulsory, 146 v
		Planetary Nebula, 54 Operation; Active, Functioning Properly, 61 Coaxiality and Concentricity, 85 Wind calm, 121		Volume, 63 Shooting Range, 132 Shooting, 136		Systems Device, Fire Alarm, 49
		Scattered Clouds, 0.2 or 0.3, 121 +		Illuminated Exit Sign, 48 Ranger Station, 95 v		Taoism, Yin-Yang, 139
		Broken Clouds, 0.6, 121		Community Territory, 53		Oil Level Window, 108
		Half Full, 158		Broken Clouds, 0.7 or 0.8, 121		Full, 158
		Soccer, 136		Overcast, Complete, 121 Human, 51 New Moon, 54 Decimal Sign, 64 Start of Winding, 81 Field Weld, 85 Oil Well, 96 Perennial Water, 93 Tank (Oil, Water), 95 Gold, 105		High Pressure Roller 109 + Multiplied by, 111 Slight Rain, Intermittent, 120 Staccato, 124 Material Damage, 142 Sound Horn, 152 Position of Buoy, 155
		Sun, 54 Flush Floor Sign Outlet, 48 Existing Trees, 51 Car, 51 Adult (Imago), 55 Sex-Linked Inheritance, 55		Annual, 56 Shift In, 59 Stop, 60 Signal, 64 + Gold, 86 Named Town within larger urban area, 92 Manganese, 105		Water Ductor Roller, 109 Vector Directed Out of Page, 128 Private Aid for Navigation, 155
		Position of Light, 155		Salt, Sea, 87		Active Male Element, 89 To Switch On, 60 Start, 63 Saltpeter, 87 On, 115 Scattered Clouds, 0.1 or less, 121
		Biennial, 56		Core Service Adjacencies, 52		Community Projects Two-Sided, 53
		Start and Stop, 107 Odd; Bit Information, 61				

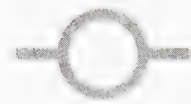
			Resonance, 115 Even, 61 Synchronous, 61		
Broken Clouds, 0.9, 121	Off, 115 To Switch Off, 60			Broken Clouds, 121 Isolated; Absolute, 60	Constant Current, 115
	Escape, 59 Egg, 55 Finished, 60 Stop Code, 61 v End of the Information, 62 v Stop, 63 Salt, 87 Passive Female Element, 89		No Entry, All Vehicles, 146		Input, 60 Complemented, 61 v
			Output, 60 Transcribe, 63		Skip, 61 Spark Gap, 115
	Step by Step, 61		Indicator, 82		Comparison, 61 AC Adapter, 63
			Line for Line, 61		Negative Charge, 128
	Prohibition, 145		Not (Negation), 60 End of Prohibition, 147		Device Control, 59 + Time, 103 v
	No Parking, 147		Vitiol, 88		Location, 52
	Repeater, 72 New Trees, 51 Health Center, 95		Bicycle, 51 Earth; Globular Cluster, 54 Larva, 55 Tetrasporangia, 56 Shift Out, 59 Salt, 87		Creation, 89 Large Hospital, 95 Horizontal Bed, 96 Overcast, 121 Injury, Fatal, 142 1000 Feet (Min.) above Weather, 151
			Power, 63		
	Occupied; (Blocked Up), 60 Citrus Fruit, 40 v Good Place for a Handout, 90 v Overcast, Sky Obscured, 121 Railroad Grade Crossing, 146 v No stopping, 147 v		System, 61		Coral, 96
			Cotton Blowing Fan, 161		Torque Converter, 161 v
	Siren, 49 Crushing Mill, 46 v Manual Steering, 108 v		Outdoor Seats, 52		Fulguration, 115
			Resection, 115		Foot Switch, 115
	Grease, 160 + Fuel, 158 v Oil, 160 +		Restaurant, 35		Right-Hand Minus Terminal, 115 +
			Council Ring, 130		Change Speed only in motion, 106



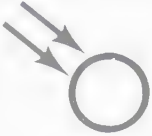
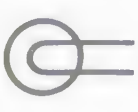
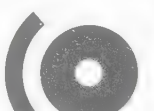
				 Single Outlet, Special-Purpose, 48 Duplex Outlet, Special Purpose, 48 v		
Airport, Civil or Military, 93	Machine Stop, 72 Stop, 63, 143 v	Letterspace, 72	Dangerous Disorder, 115			
						
Up; Raise, 157 + Arena Enclosure, 53 v	Arena Diameter, 53	Vacuum, 107 Steam Pressure, 107 v	Child-Care Position, 52	Oscilloscope, 72	Positive Charge, 128	
						
Sound Horn, 147	Steam, 107	Building Stepped Back from Arena, 53	Trash, 35	Hospital, 117	Information, 34	
		Quadder, 72 Electricity Meter, 49 v Radiation Quantities, 115 +				
Snack Bar, 35			Town Meeting, 53	Filter, Air, 157	 Buddhism, Tibetan, Path of Universality, 138	
	Small Services without Red Tape, 52 Activity Pockets, 52 v Expansion, 52 v Form-Filling Tables, 53 v Pools of Light, 53 v			Climb in Holding Pattern, 151 Uranus, 54 v Zinc, 87 Day, 86 v		
					 Spin-Drying, 103 Volcano, 96 v One Revolution, 106 v	
						
Antimony, 86	Staminate, 56	Spring, 89	Powder, 86	Salt, 87	Standard, 40 Night, 86	
	Entrance Connector, 59 + Descend in Holding Pattern, 151				Cobalt, 86 Knotter, 45 v Sal Alkali, 87 v	
			Golf, 132	Pulley, 128		
	Female, 55 Venus, 54 Pistillate, 56 Copper, 86 Antimony, 86 Friday, 89					
			Frequency, additional measuring, 71	Half Standard, 40 Bush, 40 v	Butter-Churn, 47	Link Parabole, 70

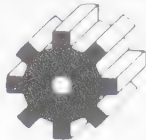
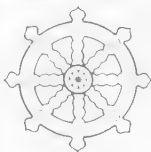


					
Pressure Storage Tank, 80	Leo, 54, 88	Sunflowers, 39 Artichoke, 40 v	Hoist Raised, 161 +	Particle Spin: Magnetic Dipole, 128	Ball Mill, 80
					Mercury, 54, 87 Neuter, 55 v Hermaphrodite (Monoclinous), 56 v Wednesday, 89 v
Microphone, 82	Microphone Socket, 63	Type, 64 +	Hand Brake Disengaged, 158 +		
	Neuter Hermaphrodite, 55 Planned Parenthood, Brazil, 114 v				
		Transcribe Volume, 63	Beater, 110	Transmission Oil Temperature, 158	Rotational Casting, 104
				Light Outlet, Wall, 49 Single Outlet, 48 v Wind approx. 1 mph (1 Knot), 121 v Enter Control Zone, 151 v	
Basketball, 135	Heavy Smog, 162 +	Magnetic Tape, 59			Wind approx. 12 mph (10 Knots), 121 +
	Conjunction, 54 Apple, 40 v Glass, 86 v		Bracket Light Sign Outlet, 48 + Vitriol, 88 v		
				System Devices, Nurse Call, 49	Size of Button and Buttonhole, 100
		Tuesday, 89 Mars, 54 Male, 55 Staminate, 56 Change Color, 73 v Iron, 86 Vasectomy, 114 v Leave Control Zone, 151 v		Through Control Zone, 151 Pump, Rotary and Centrifugal, 83 v	
Spring, 93					This Way, 90
	Direction Sign, Non-illuminated, 48 + No Use Going This Direction, 90 v				Cystocarp, 56 Character Delete, 72 Good Road to Follow, 90 v Vertical Bed, 96 v
		Project, 126 +	Feed, 63 + Remove, 63 v		
	Meter, 50 End of Operation, 62 v Ammeter, 128 + Soldered Pipe Joint, 84 v Focal Plane (Film Plane), 126 v				
		Stop for Light Vehicles (except Bicycles), 145	Iron, 86	Loudspeaker, 64	Fruit, 40



GRAPHIC FORM

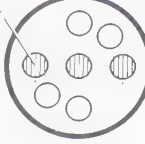
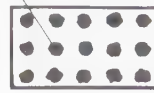
					
Gold, 86	Electric Sign Display, 48	Photosensitivity, 83	Cylindricity, 85	Lamp Bulb, 82	Duplex Outlet, 48 +
					
Hit the Road! Quick!, 90	Range Outlet, 48	Water Cooler, 80	Comet, 54	Hydraulic Pump, 83 +	Reboiler, 80 +
					
Record, 63	Water Fountain, 109 +	Ink Ductor, 109 +	Rotary Film Dryer; Flaker, 80	Alternating Current Source, 82	Blower; Fan, 80
					
Turning Cut, 106	X Ray Tube Assembly, 115	Centrifugal Pump, 80	Brake, 158	Brake, 158	Open Shade, cloudy dull, 126 +
					Transmission Oil Pressure, 158 + Drive, 158 v
Connector, Male, 83 +	X-Ray Tube, 115	Brake Off, 107 +	Brake Oil Pressure, 158		
					
Windshield Wiper, 160	Lumber, 105	Ill-Tempered Man Lives Here, 90	Water Closet, 49	Engine, Gas, 83	Air Pressure, 157
			Actinomorphic, 56 Position, 85 Oil, 87 v Balance (Center of Gravity), 98 v		
Unlock, Unclamp (Chuck Closed), 107 +	Wax, 88 Dry Hole, 96 v			Return to Segno, 124	Heat Exchanger, 83, 80
			Total Clearance; Total Release, 64 Character Kill, 72 One Child Dies, 90		
Christianity, Celtic Cross, 138	Street Light, Underground Circuit, 49 +			Brightness, 116 Light Source, 128	Gas Well, 96 +

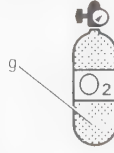
	Bright or Hazy Sun Distinct Shadows, 126 Dry; Heat, 103 v		Heavy Manufacturing, 104		Power Take-Off (PTO), Off, 161		Concave Adjustment, 161		Concave Adjustment, 161		
	Milling Cut; Grinding, 106 +		Index for Numbering Unit, 110 +		Transmission, 158 +		Circular Saw, 45		Day Position (Rear View Mirror), 160		Illumination Light, 116
	Bright or Hazy Sun; Sand; Snow, 126		Bright or Hazy Sun, distinct shadows, 126		Bright or Hazy Sun; Sand; Snow, 126		Buddhism, Wheel of Law, 138	 CAUTION LASER		Caution: Laser, 140	
	Reader, 62		Ink Fountain, 109		Heat, 114		Soluble Powder, 41		Record Turntable, 71		Observation Deck, 37
	Audio-Visual Indicator, 72		Shooting, 136 Biathlon, 137 v		Access for the Handicapped, 117		Guard on Duty, 131	 Slight Rain, Continuous, 120 Ready, 60 v Reposition Indicator, 65 v			
 Moderate Rain, Intermittent, 120 Channel is Clear, 154 v		 Carbon Ribbon Stencil, 64		 Low Beam Lights Only, 145		 Birdet, 49		 Neutral, 158 High-Ratio Gear, 158 v			
 Double Expose, 72 Police Here Frown on Hobos, 91 v Gear Drive, 107 v		 Digestion, 88		 Load, 127 +		 Defecation, 113 Repeat 1 Measure, 124 v		 Glass, 86 Arsenic, 86 +			
 Ribbon Release, 64 +		 Arsenic, 86 Nickel, 87 v		 Opposition, 54		 Exchange Position, 73		 Per Cent; Order of, 58 In Care Of; Carried Over, 58 v			

GRAPHIC FORM

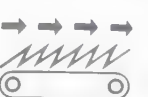
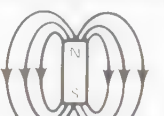
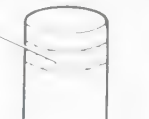
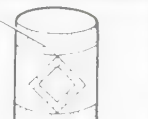


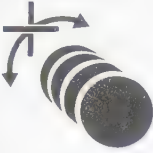
		Ascending Node, 54 Headphone, 63 Purification, 88 Digestion, 88			Use Runways and Taxiways Only, 151 +
Cherry, 40					
		Belt Drive, 107 + Belt Conveyor; Shaker, 80 v Drive, 102 v Chain Drive, 107 +			♂-♀ Monecious, 56 +
Wooden Fence, 43			Stop: Train Coming, 148	Film Feed, 116	
		Recorder for Perforated Tape, 71			
Tape Recorder, 71 +	Gear Box, 161		Trolley Stop, 91	Wear Goggles, 141	Ribbon Feed, 64
	No Bicycles, 145 + Bicycle Dispatch, 37 v Bicycle Shed, 37 v Motorcycle, 37 v Bicycle Trail, 131 Cycling, 136 + No Motorcycles, 145 + Compulsory Bicycle Trail, 147 v Cycling Lane, 149 +				
		Projector, 71	Documentary Film, 127 Film Camera, 70 v	Documentary Film, 127	Projection Room, 127
			Moderate Rain, Continuous, 120 Ruins, 95 Silver, 105 Therefore, 111		
Heavy Rain, Intermittent, 120	No Data, 113			Triad, 124	Oil, 87
Foraminifera, 96	Gypsum, 50	Spirits (Alcohol), 86	Pawn Shop, 65	Loop Tape, 108	Easy Mark, Sucker, 91
Polygamous, 56	Let It Stand, 72	Heavy Rain, Continuous, 120	Left Rear Burner, 102 + Dim Lights, 145 v	Fabric Ribbon Stencil, 64	Calendering, 104
Plate Rollers, Down (Engaged), 109 +	Arpeggio; Rolled 7th Chord, 124	Flash Cube, 126	Registering, 104	Serial Vision Sequence, 52	

					
Switch On, 82 +	Mechanical Barn Cleaner, 43	Chain Harrow, Weeder, 46	Reel Tape, 108	Editing Table, 71	Loose Fertilizer, Granulated, 41
					
Manually (Key Board), 60	Sand, 87	Chaff, 39	Stop, 156	Data Clear, Out, or Reset, 108	Orchard, 95 Scrub, 95 v
					
Copper, 105	Telegrams, 70	Filter, 107			

					
Fragile, 98 Drip Proof, 103 v	Eggs, 42 +	Swine (Pig), 42 +	Cattle, 42 +	Goat, 42 +	Donkey (Ass), 42 +
					
Sheep, 42 +	Horse, 41 +	Harness, 46	Arena Storage, 53	In Relation To, 113 Right Ascension, 54	Lamp, 126 +
					
Microphone Input, 63 +	General Surgery, 119	Screened Conductor, 82	Plate Column, 80 +	Oxygen, 36	Fluidized Bed Reactor, 80 +
					
Autoclave, 80	Microphone, 70	Band, 131	Loop Tape, 108	Notions, 65	Potato, 40 + Whole Note, 123



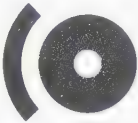
	Terminal Interruption, 59 Porcelain Sign (Enamel), attached, 48 v		Sericulture (Silk), 104		Peanut, 40		Polarization; Electric Dipole, 128		Tomato, 40		
	Powder Mixed with Water, 41		Fumigation, 41		All Services Off Arena, 53		Concentrated Feeding Stuffs, 41		Button Hole, 101		Needle Position, Center, 101 +
	Horn, 159		Work Table; Rotating Element, 106		Creep Index, 110 + Delivery, 110 v		Don't Pollute Water, 147		Galaxy, 54		Legumes, 40 +
	Pear, 40 +		Coffee, 39		Peach, 40 + Hops, 39 v		Textile, 104		Magnetic Dipole, 128 Equipotentials, 128 v		Polybrid; Numerous, 56 Infinity, 111, 126
	Haze, 120		Stitch Pattern, 101		Mixer, 80		Two-Tone Horn, 159		Atomic p Orbital, 68		Yardage, 65
	Magnetic Disk, 59		Mooring Buoy, 154		Special Regulations Buoy, 154		Cheese, 42		Bobbin, 101		Flat Roller, 46
	Threshing Drum, 46		Pick-up Attachment, 46		Magnetic Drum, 59		Can Be Dry Cleaned, 101		Pattern Disc, 101 +		Snow Tires Required, 148 +
	Timber, 45		Firewood, 45		Roll; Web, 110 +		Paper, 105		Cross Wind, 144		Plate Register, Rotary, 110 +

					
Do Not Roll, 98	Winch Brake, 161	Printing, 105			

	Hill, 51 Climbing, 56 To Write, 61 v Convex Contour, 85 + Stepless Regulation, 108 Legato, 124 +		Authorities Here Are Alert, 91 Fermata, 124 v		Ascending Node, 54 Headphone, 63 Purification, 88						
	Writing of a Comparison, 62 +		Circuit Breaker, 82		Hump Bridge, 143		Correction Key, 64		Libra; Autumnal Equinox, 54 Libra, 89 Sublimation, 88		
	Staff Lounge, 53		Road Work Ahead, 144		Should Be Drip Dried, 101		Dishonest Person Lives Here, 91		Scythe, 45		Cobalt, 86
	Centrifugal Fertilizer, 47		Instrument Panel Light, 159		Nurses, 117		Windshield Wiper, 160 +		Cumulus, little vertical development, 121 Bell, 60 Backing; Back, 84 Melt-Through, 84 v Surface Profile, 85 Cylinder Oils S and A, 108 Fire Protection Equipment, 141		
	Loose Hay, 39		Tunnel, 144		Bump, 143		Cumulonimbus clear top, 121		Cumulus, considerable development, 121 +		Cumulus and Stratocumulus, 121
	Buzzer, 64 Bell, 83		Punched Tape Writer, 61		Mid-Channel Buoy 153 +		Wear Helmet, 141		Frigorifics, 118 +		Instrument Panel Light, 159

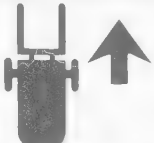
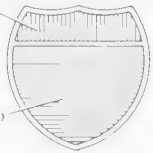
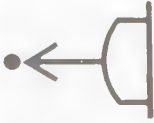


			Keep Dry, 98 + Rangear, 65 v Beach, 131 v		Valley, 51 To Read, 61 v Non-Legato, 124 v
		This Community indifferent to hobos, 90 Drinking Trough, 43 v Precipitation not Reaching Ground, 120 v			Sublimation, 88 Descending Node, 54
		Synchronism in Reading Operation, 62 +		Dip, 143 Drift, 143 v	
		Altocumulus, thin, patches, 121 Altocumulus of chaotic sky, 122 v			Seat, 46
		Shrub, 51		Tree, 51	
			Mohammedan Mosque, 95 Pagoda (Temple), 95 v		Precipitation, 88
			Marina, 131 Christianity, Anchor; St. Clement, 138 Anchoring, 153		Rotary Film Dryer; Flaker, 80
		Mailbox; Post Office, 70		Modern Pentathlon, 136	
		Body of Water, 51 Fountain, 51 + Record, 63			Lubricate every 100 hours, 160
		Smog, 162		Interior Light, 159	
			Kitchen, 44		Oscillating Motor, 83
		Alluvial Fan, 96		Winding to Right, 56 Disc, 45	
	Last Quarter Moon, 54 Red Crescent, 113 v Islam, Star and Crescent, 139 v			Telephone, 153, 64 v Telegrams, 70 v Telephone, local, 70 + Report Fires, 130 v Emergency Telephone, 132 v	
		Head, 74 Clear, 62 Cum (With), 113 v 4/4 Time, 123 v			

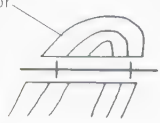
	Copyright, 58 Air Traffic Service report office, 151 v Clock Hanger Outlet, 48 v		The Owner is Out, 90		Proportional To, 111		Exit, 34		Belongs To, 112 +
	Flare Bevel Groove, 85		Disc Drill Colter, 45		Center Line, 48 Clone, 56 v Pilot Cancelled Flight Plan, 151 v		Cent(s), 58 Colon, 58 v 2/2 Time, 123 v		
	Brake, 158 Brake Oil Pressure, 158		Winding to Left, 56 To Receive, 61		First Quarter Moon, 54 Pupa, 55 Silver, 87 Monday, 89		Rake Tine, 45		Cultivator Tine, 45 Subsoiler, 45 v
	Rotate, Clockwise, 157 +		The Owner Is In, 90		Entrance, 34		Such That, 112 Apothecaries' Scruple, 114 v		Bell and Spigot Pipe Joint, 84
	Crossed Pipe Lines, 83		Lead, 87		Mine Dump, 96		Material Forming, 104		Platinum, 87
	Spotlight, Reflector, 49		Wear Gas Mask, 141		Delete Code, 61		Air Conditioning, 159		Altocumulus, thin, semi- transparent, 121 + Cirrocumulus, 122 v
	Sulphur, 87		Altocumulus spreading from cumulus, 122		You Can Sleep in Hayloft, 91		Hockey, 136		Mountain, 51
	Stitch Pattern, 101		Mountain Pass, 95		Insert Space, 72		Iron, 86		Close Up Space, 72
	Stratocumulus, not from cumulus, 121		Hatchet; Axe, 45		Close Up Space, 72				

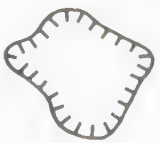
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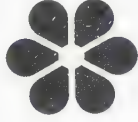
			Relationships, 52 Precipitation landing near station, 120 v Alternate Instructions, 150 v		
Edge Flange, 84 +	Flare "V" Groove, 84 Pigeon, 43 v			Turning Basin (Put About), 153	Manual, 115
	Pisces, 54, 89 Tunnel and Road, 92 Precipitation landing far from station, 120 Lines of Force, 128		Concave Lens, 128		Stretch Stitch, 101
					Pharmacy, 65
					Amphitheater, 130
	Wavefronts, 128		Brake Off, 107		Biohazard Warning, 140
			Judaism, Menorah, 139		Deciduous Forest, 44
			Rough or Bumpy Road, 143 +		
	Warm Front, Aloft, 121 +		Surfacing, 84 Altocumulus, double-layered, 121 v		Conference, 64
			Transcribe, 63		Intersection, 111 No "U" Turns, 145 v
	Reverse Course to Right, 150 + Hairpin Bend, 143 v		Apparent Magnitude, 54 Chain Harrow, Spiked, 46 v Virgo, 54, 88 v Distillation, 88 v Murmur, 113 v Mass, 128 v Mineral Spring, 131 v		Headphone, 63
					Digestion, 88
	Horse Trail, 131		Change Speed, only in stopped position, 106		Rotary Motion, 116
			Inspection and Quality Control, 104		Selective Band correction in level, 71
			Transfer, 114		
	Refueling, 107		Magnetic Filter, 107		Stack Silo, 43
			Bee Colony, 42		Meteorological Station, 44 Incubator, 47 v
	Rotating Light (Emergency Vehicle), 159		Well, 43		Bulk Storage Tank, 80
			Lamp Dimmed Low, 126 +		Grain in Sack, 39 Fertilizer in Bags, 41 v
			Whistle Post, 156		

		 Blow Molding, 104 Wine and Liquor, 65 v Pharmacy, 65 v			
Work Light, 159	Rinsing, 102			Mooring, 153	Traffic Light, 48
				 Fire Alarm, 140 Audio-Visual Indicator, 72 v	
Milking-Machine, 47	Tunnel, 144	Ceramic, 105	Dishwashing, 130		
					
Union, 111	Caustic, 115	Beginning of a Tape Fragment, 62 +	Summer, 89	Beet Lifting Share, 45	Tuning, 64 "U" Groove, 84
					
"J" Groove, 84	Proper Motion, 54	Psychology, 113	Utility Sign, 48	Materials for Plant Protection, 41	Nuclear Reactor, 80
					
Flowers, 39 +	Fragile, 98 + Glassware, 66 v	Power Take-Off, 46	Spade; Shovel, 45	Forward, 157 +	Coffee Shop, 35
				 Route Marker, U. S. (State), 147 + Route Marker, Assembly, 147	
Electric Appliances, 105 Electrical Supply, 66 v	Utility Outlet, 130	No Foreign Objects in Toilet, 35	Route Marker, Interstate, 147		
 Included In, 113 Floodlight, Special, 49 v External Condition, 62 v					
		X-Ray Tube, 115 Lamp Bulb, 82 v	Bath, 49	Online Storage, 59	Compression, 116
					
Contains, 111	Reverse Stitching, 101	Candy Store, 65	Spotlight, Lens, 49	Head Lights, 159 + Passing Light, 159 v	Direct, 151

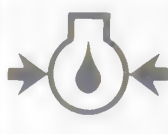
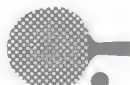
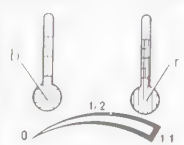
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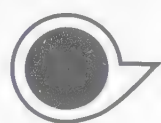
 Diesel Fuel, 158	 Parental, 55 Parking Structure, 34 v Painted Sign, 48 Powder, 86 v Post Office, 93 Proceed, 151 v Waiting, 153 Parking Lights, 159 v	 Park, 158 Post Office w/telegraph/telephone, 93 Parking, 147 +	 Metered Parking, 147 +	
 Repeat, 62 Ruppee, 58 v Registered, 58 v Prescription; Treatment, 113 v	 Fragment for Fragment, 62	 Algae, 97	 Cut (with railroad), 94 Fill (with road), 94 v	 Stenciled Sign, 48
 Lock, 35 +, 126 +	 Writing-Reading Diode, 61	 Time (in hours), 157, 86 v	 Jacketed Vessel, 80	 Christianity, Ten Commandments, 138 Judaism, Ten Commandments, 139 v
 Blood Bank, 117 Serum Labora- tories, 117 v Milk Laboratory, 118 v				

 Open Shade, Cloudy Dull, 126 +	 Brushwood, 44	 Vegetables, 40	 Cotton, 39 Non-Coniferous Trees, 95 v	 Pond; Lake, 43
 Freshwater Lake; Reservoir, 93 Dry Lake, 94 +	 Mine Pit, Open, 92 Depression Contours, 96 +	 Ridge; Arete, 94	 Lava Flow, 96	
 Wash, 94	 Salt Lake, 94	 Hour, 86	 Pre-molar, 114 +	 Vertebrates, 97
				 Pawn, 133

					
Sand Dunes, 92	Bishop, 96	Landslide, 96	Woolens, 103	King, 133	Milk Bail, 43
					
Molar, 114 Dentist, 118 v	Soluble Powder, 41	Leafy Undergrowth, 44	Clover, 40 +	Clubs, 133	Incorrect Citation, 55
					
Dentist, 118	Beet Top, 39	Mangel-Wurzel, 40 +	Sugar Beet, 39 +	Large Particle, 41	Food Processing, 104
					
Atomic d Orbital, 68	Restaurant, 35	Small Particle, 41	Flax, 39 Stop for Special Treatment, 102 v		Uranium, 105 Atomic Power, 105 v
					
Florist, 65	Islam, Holy Qur-an, 139	Jainism, Brush and Bowl, 139	Herbicide, 41	Campfires, 130	No Fires, 130
					
Fire Area (Potential), 147	Don't Extinguish with Water, 141	Inflammable Liquid, 98 + Spontaneously Combustible, 98 v Dangerous when Wet, 98 v Oxidizing Agent, 99 v		Queen, 133	Buddhism, Lotus, 138
					
Zoroastrianism, Sacred Fire, 139	Type "A" Filter, 126	Type "A" Filter, 126	Main Light Switch, 159	Instrument Panel Light, 159	Tennis, 132
					
Emulsion, 41	Sulphur, 105	Ping-Pong, 132	Tennis, 132	Station Warning, 156	Water Closet, 49 Red Light, 116 v



	 Reading Light, 36 Light Switch, 35 Illumination Light, 116 v		 Engine Speed (in RPM), 157	 Engine Oil Pressure, 157	
 Ignition On, 158 Starter, 159 v	 Differential Lock, 161	 Blood Donors, 117	 Hydraulic Reservoir, 158	 Heater, 159	 Spotlight, Profile, 49 +
 Brake Oil, 158	 Fuel Tank Selector, 158	 Indoor Games, 66	 Oven Light, 102	 Chemical, 105	 Abortion of Un- known Sex, 55
 Ink Stop, 109 Night, 86 v	 End of Medium, 60	 Mechanic, 65	 Thermometer, 84	 Temperature, 157 Heating, 160 + Cooling, 160 +	
 Coagulation, 115	 Golf, 132	 Factorial n, 112 Specimen Verified, 55 Other Dangers, 144		 magenta Position of Light, 155	 Softball, 132
 Thermostat, 72	 Heater, Starter, 158	 Temperature, Water, 157	 Heat Sealing, 104	 Heating Control, 35	 Lightning Arrester, 82
 Switch Off, 82 +	 Drill Colter, 45	 Flat, 124 F major; D minor, 125	 Double Flat, 124 B- flat major; G minor, 125 v		 A- flat major; F minor, 125 +
 Quarter Note, 123	 Eighth Note, 123 +	 Record Shop, 65 Eighth Note, 123 + Acciaccatura, 124 +		 Treble Tone, 64 Half Note, 123	 Penny, 58

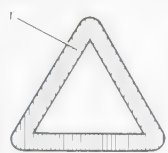
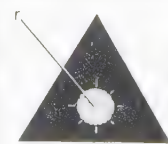
					
Partial Derivative, 111	Declination, 54	Curve; Cam, 108	Bass Tone, 64	Piano (Soft), 124 + Quiet Area, 52 v	Pluto, 54
		Mature Forest, 44 Thicket, 44 v Polewood, 44 v Regeneration, 44 v Reserve, 44 v			
Oak, 44 +				Clearing, 45 + Thinning, 45 v	To Plant, 44 + Regeneration Husbandry, 44 v Soil Cultivation, 44 v Repair Planting, 44 v
					
Copse (Coppice), 44	Open Door or Lid, 103	Ignition Switch, 158	Car Rental (Car Hire), 37	Cutting, 115	Paragraph, 58 Paragraph, 73 v
			Aries; Vernal Equinox, 54, 88 Tea, 39 v Invert Type, 73 v		
Drizzle, 120 Decimal Sign, 64	Tropical Storm, 120 +				Bass (F) Clef, 123
					
Lost and Found, 34	Ink Fountain, 109	Retort, 86	Retort, 85 Distillation, 88	Cancer, 54, 88 Dissolution, 88	Blower, Gas, 83 Marine Fossil, 92 +
	Lead, 87 + Saturn, 54 v Plant with Woody Stem, 56 Shrub, 56 v Tree, 56 v Saturday, 89 v				
			Perennial, 56 Jupiter, 54 Tin, 86, 87 v Thursday, 89 v Halt, 90 v	Delete, 72	Dram, 114 Ounce, 114 v
					
Delete, 72 +	Pound Sterling, 58	Ampersand (And), 58	Subgenus; Section, 56	Capricornus, 54, 89	Shin (Sham, There), Put in one piece, 133
					
Per, 58	Alto (C) Clef, 123	Hinduism, Aum; Brahman-Atman, 139	Tobacco, 39 + Medicinal Plants, 39 v	Gastropods, 97	Cane, 40

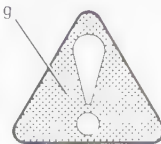
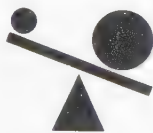
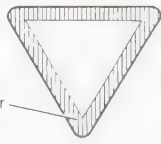
GRAPHIC FORM



					
Plant Remains, 97	Spades, 133	Adhesive to plants (with chemicals), 41	Use Cool Iron, 101 +	Turnip, 40	Weed, 40
					
Christianity, Trisketra, 138	To Search, 61	Television Monitor, 70 To Find, 61 v		Reader, 62 Fluoroscopy, 116 v	Observation Desk, 37
					
Ophthalmology, 118	Customs, 38	Fish Remains, 97 Fishing, 131 v Fish Hatchery, 131 v		Goose, 43 + Turkey, 42 + Turkey Chick, 43 v Duck, 43 +	
					
Loudspeaker, 64	Fruit, 40	Gold, 86	Grill, 102	Football, 132	Symbol has been Found, 62

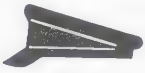
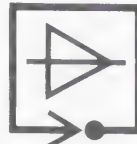
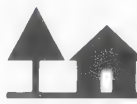


	Space, 60 Transformer, 49 Behavior, 52 Head, 55 Evergreen, 56 Extract, 59 Apply Heat, 67 3-Phase 3-Wire (Delta), 81 Fire, 86	Elevation Above Sea Level, 95 Grease, Synthetic Oil Base, 109 Triangle (Geom.), 111 Change, 113 Hail, 120 While in Control Area, 151 Fixed Beacon, 155			
			Increment (Calculus), 111	Danger Point on Right Bank, 154 +	Probably Safe to Land Here, 141
	Warning, Danger, Caution, 143 Slow Moving Vehicle, 140 v	orange 	Lubricate every 5 hours, 160 Point of Interest, 95 v Weekly Lubrication, 109 v		
				Black Beacon, 155 Boundary Beacon, 92 Highest Point in Country, 95 Limited Depth, 153	
	Ice Pellets (Sleet), 120 Trigonometrical Point 1st order, 95				
		Air, 86	Increase Detail, 73 +	Grade Crossing, 144 +	Splash Proof, 103

		 Electrical Danger, 140 Falling Objects, 140 v Suspended Load Overhead, 140 v Machinery Hazard, 140 v		
Emergency (or Hazard) Flasher, 159	Bleach, 100		Poison, 140	Do Not Pierce; Keep from Heat, 141
				
Radiation Warning, 140 Don't Open Before Vehicle Stops, 38 v		Shear Pin, 161 Emergency Engine Stop, 159 v Safety Valve, 161 v	Look Out! (Safety Alert), 140	Crossing, 147 +
				
Camping Site, 148 Campground, 130 v	Port Limits of Channel, 154 +	Level, 127	Air, 86 Snow Grains, 120	Prism; Beam-Bending Magnet, 128
				
Cloakroom, 34 Dressing Rooms, Nurses, 117 + Dressing Rooms and Bathrooms, 117 v		Woman, 89 Shower Head, 49 Pregnancy, 89 v Mother with One Child, 90 + The Family, 90 v		Triple Arthrodesis, 113 Coniferous Trees, 95 v
				
Picnic Area, 130	Balance, 46	Man with a Gun Lives Here, 91	Caution: Pressurized Radiator, 157	Electric Traffic Cone, 48
				
Heavy Weight This End, 98	Oil Periodically with Sae 30, 160	Single-Outlet, Special- Purpose, 48	Caution: Pressurized Radiator, 157	Cleaner, 46 Modulator/ Demodulator, 71
				
More Difficult Ski Run, 132	Beware, 146 Hospital, 147 v	Private Heliport, 151	Danger from Avalanches, 148	Pool (Billiards), 132
				
Sailing, 135	Merge, 59 Water, 86 Yield Sign Ahead, 144		Yield; Give Way, 146	Stop, 143 + Planned Parent- hood, India, 114 v Yield; Give Way, 146 v

GRAPHIC FORM

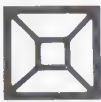
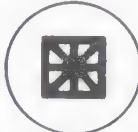
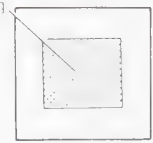
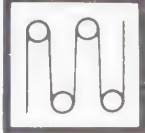
					
Road Spoiled, full of other hobos, 90	Del (Vector), 111 Showers, 120 v	Squall, 120	Danger Point on Left Bank, 154 +	Limited Headroom, 153	Earth, 86 Offline Storage, 59 v
					
Rain Showers, moderate or heavy, 120 +	Red Currant, 41 +	Powder, 41	Bar, 36	Grape Vine, 40	Gooseberry, 40
					
Earth, 86	Mother Dies, 90 Aerial (Antenna), 83 v	Crucible, 86	Cyclone Separator, 80	Clay, 87	Vineyard, 40
					
Extrusion, 104	Top-Heavy, 98	Bar, 36	Unit, 62	Letterspace, 72	Stop Ahead, 144
					
Side, 74	Increasing Action, 103 Volume, 63	Volume, 63	True Channel, Distance from Bank, 153	Steep Ascent, 144	Eye, 128
					
Review, 63	Listen, 63	Attitude of Foliation, 96	System Devices, Private Telephone, 49 +	Foot Control, 63	Stopping Motion, 107 +
					
Steep Ascent, 144	Platform Height, 161	Table Return, 109 + Stack Height, 109 +	Inclined Plane, 128	Falling Rocks, 144	Direction for Firemen, 141
					
Mixer, 71	Floor Outlet, Public Telephone, 49 +	Abdomen, 55	Fillet, 84 Plowshare, 45	Spotlight, Sealed-Beam, 49	Steep Descent, 144

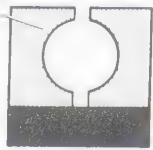
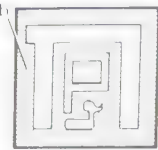
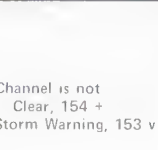
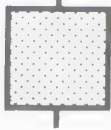
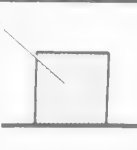
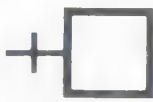
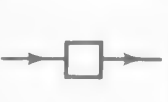
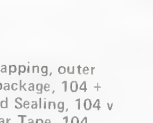
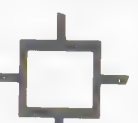
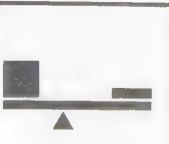
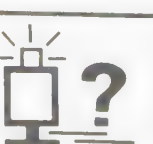
	 Small Craft Warning, 153 Golf Course, 95 v Frequency, signalling, 71 v			
Swing Plow, 46 +		Slow Motion, 116 Reverse, 64	Procreation, 89	Child-Bearing, 89
	Amplifier, 82 Column Justify, 72 v Pneumatic Flow Direction, 83 +			
		Concentric Reducer, 84 +	Diode, 82 +	School, 95
				
Launching Ramp, 131	Police and Inspection, 145	Work Light, 159	Amplifier, 71	Transmitter Amplifier, 71
				
Exposed Wreck, 94				
				
Infinity, 126	Factory District, 104	Caution: Rocks, 131	Lodgings, 130	Hostel; Pioneer Cabin, 130 Youth Hostel, 148 v
	Needles; Woody Undergrowth, 44 Stitch Pattern, 101 v			
		Chrome, 105	Group Camping, 130	Cutter Bar, 161
				
Mower, 46				
	Kind Woman, tell pitiful story, 91			
		Thrust Fault, 96	Crushed Grain, 39	Ten, 62 +
				
Thousand, 62 +				
				
Stitch Pattern, 101	Cold Front, Aloft, 121	Cold Front, Surface, 121	Slight Showers of Snow Pellets, 120 + Emergency (or Hazard) Flasher, 159 v	No Entry, Vehicle exceeding Height, 145
	Cancel, 59 + Danger Point in Mid-Channel, 154 v		Timer Off, 107 + Danger Point in Mid-channel, 154 v	
			Transcribe Volume, 63	Gale (Warning) 153

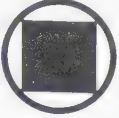
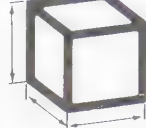
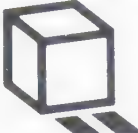
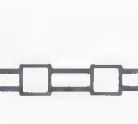
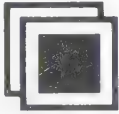
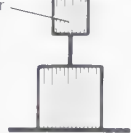
GRAPHIC FORM

			Limited Channel Width, 153 No Entry, Vehicle exceeding Width, 145 v		Reverse Black/White, 73
Rapid Motion, 116 Fast Forward, 103	Feed; Eject, 63				
					Zoom, 126
Cock Valve, 84 +	Safety Valve, 84	All Control Valves, 81	Temperature Controller, 81 +		
				Judaism, Star of David, 139 Red Star of David, 113 v	
Bucket Conveyor, 80	Fallout Shelter (Civil Defense), 140	Magnesium, 105			

	Masonry Building, 43 Range, 51 Drinking Fountain, 50 Male, 55 Thorax, 55 Null, 59 Auxiliary Operation, 59	Functional Unit, 61 v World and Nature, 89 Special Oils with detergents, 108 d' Alembertian, 111 Diaphragm Open, 116 v Large Focal Spot, 116 v Other Objects, 142		Restriction, 152		Lubricate every 50 hours, 160 City, 92 + Military Installation, 95 v Monthly Lubrication, 109 v	
	Permission, 152		Position of Channel, Right Bank, 154 +		Compass and Map Required, 141		Shed, 43
	Acreage, 44		Garden, 44 +				
	Comparator, 61		Mine Shaft, 96 Transformer, 61 v Blackening, 116 v		Autosomal Inheritance, 55		Male with Trait Under Study, 55 Propositus (Proband), 55 v Memory, 61 v
	End of Letter, 63 Train, 51 Pelvis, 74		Magnetic Tape Recorder, 61 Product, Generalized, 104 v		Story, 43 Should Be Dried Flat, 101		

				Group of Buildings, 51 Signal Translator (Changer), 71 v		
Building, Low, 51 Data Link Escape, 59	Building, High, 51	Cross-Channel Fairway Left Bank, 154				Prohibition, 152
						
Observe Landing Precautions, 151	Should Be Line Dried, 101	Single Insulation, 64	Record Separator, 59 +	Core Memory, 59	Modulator/ Demodulator, 71	
			Enquiry, 59 Month, 86 Lead, 105			
Peripheral Unit, 61	Building, Medium, 51				No Landing, 151	Incisor, 114
						
Molar, 114 Studio, 70 v	Washable, 100	Central Unit, 61	Bed and Table Linen, 103	Remote Control, 63	Safety Island, 147	
	Can Be Tumble Dried, 101 Single Outlet, Floor, 48 v Chest, 74					
		Record Turntable, 71	Kitchen, 44	Terminating Set, 71	Should Be Drip Dried, 101	
						
Flash Cube, 126	Hydraulic Reservoir, 158	Double Insulation, 64	Easier Ski Run, 132	Laundry, 35	Mix, 114	
						
Heater, 159	Incubator, 47	Automatic Exposure Control, 116	Processing Machine, 71	Pasture, 44	Meteorological Station, 44	
						
Wear Goggles, 141	Audio-Visual Indicator, 72	Position of Channel from Right Bank, 154	Fine Focal Spot, 116	Small Focal Spot, 116	Auto Nature Trail, 131	

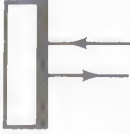
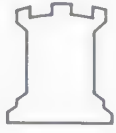
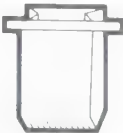
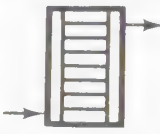
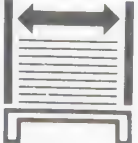
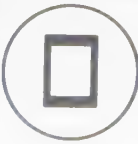
	Counter, 61 Arithmetic Unit, 61 v Writing-Reading Diode, 61 v Flip-Flop, 61 v				
Goods to Declare, 38	Bus Stop or Station, 147	Parking, 147	Parking Structure, 34		
					
Hotel Reservations, 35	Add, 114 Dispense, 114 v	Transfer, 114	Channel is not Clear, 154 + Storm Warning, 153 v	Portable Sign, 48	Portable Sign, 48
					
Cathedral, Church, 95	Crucible, 86	Filter, 107 +	Steam Inspection Window, 107	Cupboard Dry, 103	Cooling Tower, 80
					
Transmitting Station, 71	Transmitter, 71 + Signal Generator, 71 v	Starboard Limits of Channel, 153	Cistern, 43	Can, 153	Kitchenware, 66
					
System Devices, Fire Alarm, 49	Vista, 52 +	Operational Block, 81	Electric Eye (Beam Source), 49	Reciprocating Pump, 80 +	Converter, 71
					
Moveable Grid, 116	Alcohol In This Town, 91	Death, Male, 55	Wrapping, outer package, 104 + End Sealing, 104 v Tear Tape, 104	Ink, 87	
					
Micro-memory, 61	Filter Cleaning, 107	Compressor, 83 Water Closet, 49	Ill-Tempered Man Lives Here, 90	These People Are Rich, 90	Diver's Flag, 154
					
Functional Unit Ready, 62	Heavy Weight This End, 98	Railroad Station, 37	Headlights, tractor, 159 +	Collator Detector, 110	Electricity Meter, 49

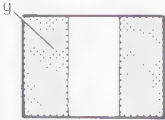
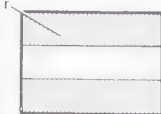
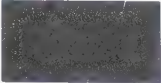
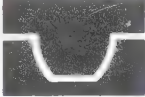
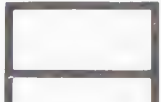
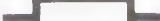
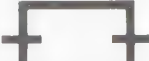
				Stack, 43 Cubic, 69 + Orthorhombic, 69 +	
Radiation Quantities, 115 +	Town Meeting, 53	Aerial (Antenna), Loop, 83			Dimensions, 98
					
Orthorhombic, 69 + Cubic, 69 +	Open Here, 98 Pull, 98 v	Lift Here, 98	Gift Shop; Shopping Center, 65	Protect from Heat, 98	Do Not Stack, 98
					
Shear Pin Construction, 108	Dizygotic Twins, Male, 55 +	Cement Wall, 43	Lane may be Followed, 148 +	Battery Slave, 159	Fuel Tank Selector, 158
					
Stereo Focal Spot, 116	Starboard Limits of Channel, 153	Tower, 51	Hurricane Warning, 153	Mating, 55 + Mating, Male, Progeny, 55 v	
					
Magnetic Ink Characters, Branch Bank Identification, 58 +		Dwellings, 93			

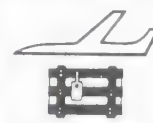
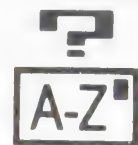
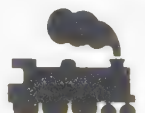


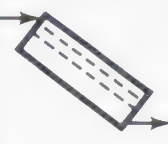
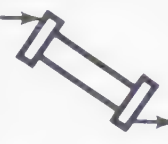
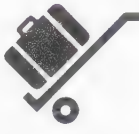
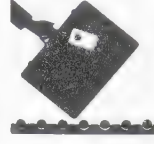
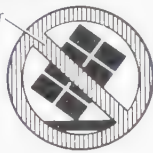
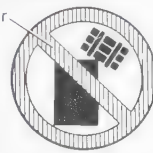
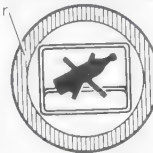
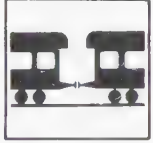
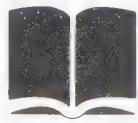
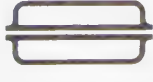
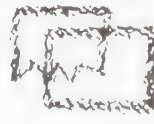
					
Stationary, 74 Require Doctor, 141	Turkish Towelling, 103	Level, Low, 74 Bauxite, 105	Level, Middle, 74	Whole Torso, 74	Daily Lubrication, 109
					
Level, High, 74	Approach to Grade Crossing, 146 +	Lubricate on Schedule, 109	Choke, 158	Reservoir, 43	Main Switch, 107

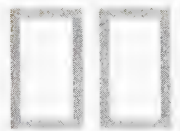


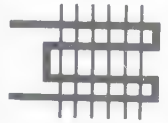
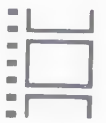
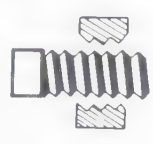
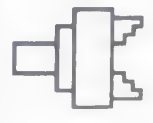
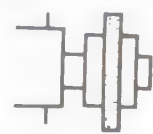
	Road for Motor Vehicles, 146 v Driving on Tracks Permitted, 146 v Parking Off Road, 147 v				Recorder for Perforated Tape, 71 Film Scanner, 71 v
	Metal Wheel, 45 + Entrance of Tributary, 153 v				A Gentleman Lives Here, 90 Clutch, 108
	Natural, 124		Overcurrent Release, 71 +		Forward, 74 +
	Milk, 42 +		Hand Switch, 116		Cutter Radius Compensation, 108
	Rook, 133		Sickness Containers, 36		Dung Spreader, 46
	Self-Emptying Wagon, 46		Electrical Precipitator, 80		Mobile Elevator, 46
	Motor Gate, 144		Gemini, 54		Tractor, 46 Rear Loader, 46 v
	Drilling Cut, 106		Barber, 65		Net Weight, 98
	Fuel, 158 Filling Station, 148		Fire Extinguisher, 36, 141		Tobacco, 65
	Used Razor Blades, 35		Content in Liters, 98		Water Power, 105
	Blankets, Bedding, 99		Stack Range, 109		Milling Spindle, 106
	Engine, Gas, 83		Bar, 36		Cosmetics, 66
	Program, 61		Ambulance, 117		Fire Extinguisher, 141
	Gross Weight, 98		Range, 50 Process, 58 Temperature, 81 Pressureless Container, 108 Lubricate every 500 hours, 160		

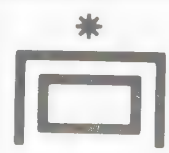
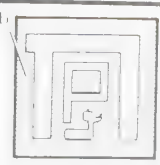
					
Automatic or Semi-automatic cycle, 108	Equipment Outline, 82	Authorized Channel, 154	Prohibited Channel 154	Parking Lights Required at Night, 147	Money Orders, 70
					
Coal, 97 Railroad Station, 92 v Village, 92 v Half Rest, 123 +	Urine, 87 Outlet, Surface Fluorescent Fixture, 49 v Water Cistern, 50 v			Hydraulic Fluids and Synthetic Oils, 109	Predefined Process, 58
					
International Airport, 93	Oven, 102	Cellar, 44	Vicious Dog Here, 91	Shower Stall, 49	Rough Wood, 50
					
Mailbox; Post Office, 70	Urinal, 49	Metalworking, 104	Enlarged Field, 116 + X-Ray Television, 116 v	Mailbox; Post Office, 70 +	Registered Mail, 70
					
Reduce Contrast, 73 +	Video Tape Recorder, 71	Console Switch, 116	Spot Film Device, 116	Documentary Film, 127	Television, 66
					
Unclaimed Baggage, 37	Alum, 87	Barricade Sign, 48	Resistor, 82	Expansion Joint Flange, 84	Frequency Band, 71
					
Gate, 144	Dangerous Drinking Water, 90	Framing, 126	Closing, 104	Weight, 108	Borax, 87
					
Sal Alkali, 87	Baler, 46	Television Camera, 70 +	Electric Motor, 106	Image Amplifier, 116	Parked Bus, Truck, or Tractor, 142

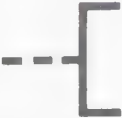
 Well Guarded House, 90	 Smoking Permitted, 140	 Spindle Rotation Direction, 106	 Insured Mail, 70 Wrapping of Small Packages, 70 v	 Manure, 41	
 Parcel Post, 70	 Weir, 153	 Dungheap (Midden), 43	 Plate and Frame Filter, 80	 Water Cooled Condenser, 83	 Firing Order, 159
 International Parcel Post, 70	 Portable Tape Recorder, 71	 Ammeter, Generator, 159	 Planing Cut, 106	 Drilling Spindle, 106	 Threading, 106
 Winch PTO Disengaged, 161 +	 Air Freight, 38	 Wrapping of Large Packages, 70	 Vending Machine, (Automat), 36	 General Delivery, 70	 Access for the Handicapped, 117
 Water Closet, 49	 Documentary Film, 127	 Good Place to Catch a Train, 91	 Soft Shoulder, 144 Keep Right, 145 v	 Narrow Structure, 144	 Customs, 38
 Baggage Claim, 37 +	 Car, 71 Outside Broadcasting Unit, 71 v	 Bus, 37 No Entry, Bus, 145 v	 Radio, 159	 Train, 37 Street Car, 37 v	
 Car Sleeper Train, 37	 No Entry, Goods Vehicle, 145 + Delivery Entrance, 34 v	 Luggage, 66 Customs, 38 v	 No Motor Vehicles, 145	 Camera Store, 65 View Point, 130 v	
 Lubricate every 2000 hours, 160	 Casting, Molding and Metallurgy, 104	 Side Running Lights, trailer, 159	 Trailer Site, 148, 130 +	 Emergency Power Generator, 71	 Grade Crossing without Gates, 144

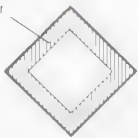
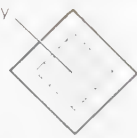
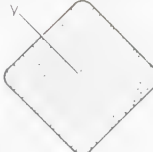
				 Tetragonal, 69 + Monoclinic, 69 + Triclinic, 69 v	
Screener, 80	Rotary Drum Dryer; Kiln, 80	Telegrams, 70	Nursery, 34		
					
Add Detergent, 102	Unloading Auger, 161	Baled Hay, 39	Baggage Claim, 37	Porter, 37	Baggage Claim, 37
					
Currency Exchange, 37	Fuse, 115	Neutral Grid Electrode, 115	Luggage Locker, 66	Stroller Area, 66	Stroller and Luggage Area, 66
					
No Smoking, 140	Do Not Tumble, 98	Do Not Tumble, 98	Do Not Litter, 38	Circulation in Services, vertical, 52	Stacking Limit, 98
					
Train, 37	Bath, 35	Handle with Care, 98	Gymnastics, 134	Require Medical Supplies, 141	Signal Lamp Required, 141
					
Disturbance, 108	Buildings (Offices), 93	Fixation, 88 Gemini, 88	Connector, Male, 83 +	Piezoelectric Crystal Unit, 82	Threshing Floor, one entrance, 43
					
Fuel Tank Selector, 158	Bookstall, 65	Sluice, 105	Cigarette Lighter, 159	Tickets, 37	Jogger (Vibrating Table), 110
					
Batteries, 126	Longitudinal Sealing, 104	Film Changer, 116	Compression Molding, 104	Improve Register, 73	Cowards, will give, to get rid of you, 91



					
Aerial (Antenna), Loop, 83	Club, 38	Single Room, 35 +	Tramway, 131	No Passing, 145 +, 146 v	No Motor Vehicle with Trailer, 145
				Terra Cotta, 50 Ashlar, Cast or Natural, 50 v Limestone, 97 v	
Heavy-Light (Weight), 157	Air Cooled Condenser, 83	Motion Pictures (Fluoroscopic), 116		Baggage Storage (Left Luggage), 37	
					
Halfnut Open, 107 +	Turning Spindle, 106	Room with Twin Beds, 35	Grinding Spindle, 106	Weight, 103	Confucianism, Conjugal Bliss, 138

				
Mining, 105 Move Up, 73 v Down Bow, 125 v	Fold Grain, 100	He' (Haya, Happened), Win half pile, 133	Annual Parallax, 54 Pi (3.1416), 112	Road Narrows, 143 +
				
This Is The Place, 90 Dangerous Neighborhood, 90 v	Synchronous Idle, 60	Two, 114	Underpass, 51	Mail Sending, 70 +
				
Winter, 89 Fish Scales, 97 v Shinto, Torii, 139 v	Power Take-Off (PTO), On, 161 +	Protect against Cold, 98	Handle with Care, 98	Hardware, 66
				
Open to Street, 52 Radio or TV Station, 52 v	Parking, 147	You Can Camp Here, 90 Manger, 43 v Move Down, 73	Accumulator (Impulse- storing), 62 +	

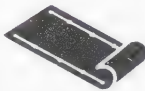
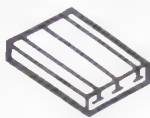
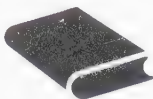
			 Drying, 103 Warmer, Warmer Drawer, 102 v	
High Level, 157 +	Multiplier, 61	Half Full, 158 +		Manger Partition, 43
	 Fork Spread, Open, 162 Clamp, Release, 162 + Sideshift, Left, 162 +			
Engage; In, 157 + Lock, 116 v		Casting, 104 Grill, 36 v	Ashtray, 36	Used Towels, 35 Trash, 35 v
				
Rotary Vacuum Filter, 80	Drain, 107	Reverse, 157 +	Stop and Check Brakes, 147	Resistor (Heater), 82 Transpose, 72 v
				
Permanent Magnet, 83 Move Left, 73	Right Elbow, 74	Trail Shelter, 130 +	Comment, Annotation, 59	Swing (or Pivot) Right, 162
				
Concentration, 113	Right Wrist, 74 +	Move Right, 73	Left Elbow, 74	Noon (Ness, Miracle), Do nothing, 133 +
				
Pe' (Po, Here), Put in one piece, 133	Swing (or Pivot), Left, 162	Shower, 35	Hit the Road! Quick!, 90	Left Wrist, 74 +

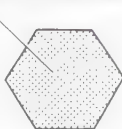
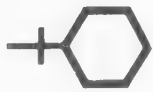
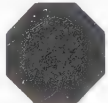
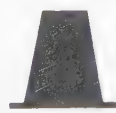
			
Sex Unknown or Unspecified, 55 Soap, 87 Position of Channel from Left Bank, 154	Priority Road, 146 Danger, 154 v	Priority Road, 146	Warning, 143 Recommended Channel, 154 Filter, 157 v



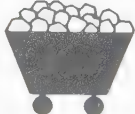
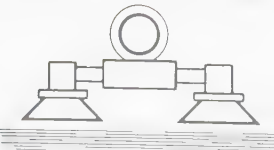
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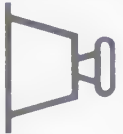
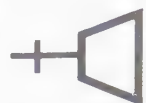
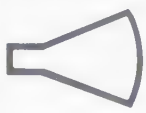
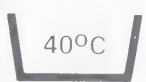
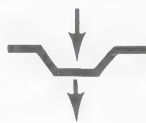
	Position of Channel from Left Bank, 154	Position of Channel from Left Bank, 154	Origin; Innermost Essence, 89	Antimony, 86	Start, 103
	Launder Carefully, 100	End of Priority Road, 146	Boats Keep Out, 154	Rhombohedral, 69	Hold Your Tongue, 91
	Inclined Mine Shaft, 96	Electric Facilities, 140	Speed Limit, 156	Poison, 98	Radioactivity, Low Level, 98 +
	Corrosive, 99	Compressed Gas, 99 Explosive, 98 v	Snowmobile Crossing, 132 +	External Channel, 62 +	Extra Caution Area, 132
	Internal Channel with even addresses, 62	Grease, Oil Base, 109 Subtotal, 64	Decision, 58	Diamonds, 133	Sort, 59
	Bush, spindle tree, 40 Be Prepared to Defend Yourself, 91 v	Landing or Take-Off Direction, 151	Buoy, 155 +	Vertical Strips, 155	Diagonal Bands, 155
	Checked Buoy, 155	Fish Trap Area Buoy, 155	Light Buoy, 155	Diamond, 69	Keep Quiet, 91
	Stitch Pattern, 101	Turn, Rotate Clockwise, 74 +	Forward Diagonal, 74 +	Input/Output, 59 Gas Flow, 80 Flatness, 85	
					Lubricate every 250 hours, 160

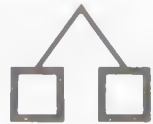
					
Manual Input, 59	Punched Card, 59 +	Deck of Cards, 59	Handtools, 45	Cartwheel to Left, 74 +	Grindstone, 46
					
Float, 46	Snow Play, 132	Work Table; Slide Element, 106	Book Stall, 65		

	Special Oils without detergents, 108 Sign Outlet Only, 48				
		Monoclinic, 69	Preparation, 58	Lubricate on Schedule, 109 +	Nickel, 105
					
Resonance Hybrid, 68	Rhombohedral, 69	Hexagonal, 69	Resonance Hybrid, 68	System Devices, Electric Clock, 49	Engineering Materials, 104
		Stop Ahead, 144 Closed: Avalanche Area, 132 v			
Medical Alert, 113			Historic Plaque, 131	Stop, 143	Stop, 143
					
Snowmobile Trail, Direction, 132	Nothing to Declare, 38	Small Target Areas, 53	Hexagonal, 69	Metropolis, 92	City of no administrative importance, 92
					
Moveable Traffic Cone, 48	Blackout Headlights, 159	Nun, 154	Spar, 154	X-Ray Tube Assembly, 115	Cream Separator, 47

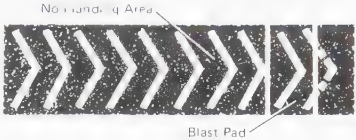
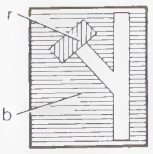


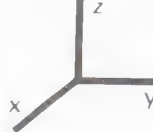
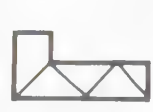
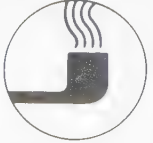
					
Castle, 95	Cultural Monument, 131	Lighthouse, 131, 94	Lookout Tower, 130	Picnic Area, 130	Oil, 105
					
Telecommunications, 93	Windmill, 95	Projector, 71	Use Cool Iron, 101 +	Feeder Ready or Moving, 109	Well-Guarded House, 90 +
					
General Surgery, 119 +	Vacuum Paper Feeder, Vertical, 109	Vacuum Paper Feeder, Tilt, 109	Loader Bucket, Dump, 161	Quayside or River Bank, 144	Blackout Clearance Lights, 159
					
City of administrative importance, 92	Manual Operation, 58 Plug; Slot, 84	Arc-Spot; Arc Seam, 84	Scoop for Front Loader, 46	Mooring Buoy, 155	Filling Station, 43
					
Sprayer, 47 +	Atomizer, 47	Basket Lift, Up, 161	Trench Silo, 43	Duster, 47	Coal Mining, 105
					
Loader Bucket, Roll Back, 161	Bath, 35	Motor Boating, 131	Ferry, 36	Large Seaport, 94	Ship, 36
					
Truck Crossing, 144	Bath, 35	Market, Grocery, 65	Whistle Buoy, 154	Hot Shelves on Stove, 102	Basketball, 135
					
Comb, 109 Feeder, Sheet, 109 v	Feeder, Sheet, 109	Threaded Bushing, 84	Clutch Engaged, 158 +	Radiography, 116	

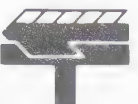
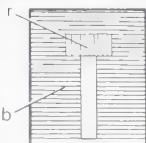
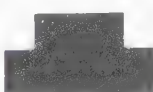
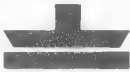
					
Fluorography Camera, 116	Radio (On-Off-Volume), 159	Documentary Film, 127	Floodlight, 49	Softlight, 49	Sound System, 49
					
Turbine, 83	Cathode Ray Tube (TV), 82	Loudspeaker, 64, 82 v	Volume, High, 70 +	Suction Unit, 107	Jet Mixer; Ejector, 80
					
Basket Lift, Down, 161	Loudspeaker Volume, 70	Warm Washing, 102	Gentle Action Washing, 102	Rinsing, 102 + Floating Washing, 102 +	Low Water Level, 102 +
					
Draining, 102	Corn Picker, 46	Trash, 35	Metalworking, 104	Thermoforming, 104	Trapeze Current, 115
					
Shuffleboard, 132					

	No Delay Expected, 150 To Modify, 61 v Insert Indicated Material, 72 Threshold Current, 115 v			Tin, 105 Phase, 61 v Delta Current, 115 v	
		Left Shoulder, 74 +			Ladder, 45
					
Output, 60	Disordered Intellect, 89	Men Fight, 90	Dizygotic Twins, Male, 55	Windmill, 43	Electric Transmission, 105

				3-Phase, 3-Wire Vee Connected, 81 "V" Groove, 84 Bevel Groove, 85 v Up Bow, 125	
Cleaner, 46	Museum, 131	Stitch Pattern, 101	Pine Forest, 44		
Beet Lifting Share, 45	Acknowledge, 60 + Surface Roughness, 85 Aircraft at Assigned Altitude, 150		Flexor; Urine, 113 +	Root Of, 112	Ink Flow, 109
Spirits (Alcohol), 86	Vertical Tabulation, 60	For All, 111	Input, 60	Spirits (Alcohol), 86	Volcano, 96
Correction Key, 64	Manger Partition, 43	Dissonance, 124	Crucible, 86	Safety Island, 147	Firearms and ammunition required, 141
Form Feed, 60	Barley, 39	Clearance, 157	Smaller Than, 111 Growth, 52 Angularity, 85 v Angle, 111 v Altostratus, thin, semi-transparent, 121 v Crescendo, 124 After, 150		Insert Indicated Material, 72
Cirrus and Cirrostratus, not 45°, 122 +	Lightning, 120	Carriage Return, 60	Not Smaller Than, 111	Elevate, 127 Foot Switch, 116 v	Smaller Than or Equal To, 111
Indicate Direction and Proceed, 141	Lever Arm, 128 Fulcrum, 128 v	Rockshaft Raised, 161 +	Left Stabilizer Down, 162 +	Finishing and Coating, 104	Duty-Free Shop, 38
Altostratus, thick, 121	Much Smaller Than, 111	Canal with Lock, 93	Loose Gravel, 144	Sharp Road Deviation (Left), 146	

		Larger Than, 111 Decrescendo, 124 Marcato, 124 Before, 150			
Feldspar, 97			Non-Linear Variability, 82	Horizontal Tabulation, 60	Not Larger Than, 111
	Larger Than or Equal To, 111 High Heat, 102 v				
		Will Attempt to Take Off, 141	Right Stabilizer, Down, 162 +	Presser Foot Pressure, 101	Material Removal, 104
					
Pawn Shop, 65	Record Turntable, 71	X-Ray Tube, 115	Much Larger Than, 111	Deceptive Area, 151	
					
Mean Value, 112	Swell, 124	Chute, 43	Cirrostratus, veil covering sky, 122	Saturable Properties, 82 Cart Rental, 37 v	Jump, 61
					
Limiter, 71	Jump when there is a comparison, 62 +	Circular Path Left, 74 +	Balance, 46	Body Section Radiography, 116	Massive Igneous Rock, 97 +
	Rack, 45 3-Phase 3-Wire (Star), 81 "Y" Junction, 143				
		Yes, 141	3-Phase 4-Wire (Star), 81	Hemp, 39	Roller Crusher, 80
					
Sprinkler, 47	Departing Flights, 37 +	Man, 89	Directional Aerial, 71 +	Lateral Joint, Threaded, 84	Yen, 58
					
Receiving Station, 71 +	No Thru Road, 146	Peripheral Unit, 61	Friendship among Men, 90	6-Phase; Fork with Neutral, 81	To Select, 61

					
Insert Indicated Material, 72	A Beating Awaits You Here, 91	Borax, 87	Divided Road Ends, 143	Man Dies, 90	Monozygotic Twins, Male, 55
					
Grab Hoist, 46	Selection during Reading, 62	Special Sign Outlet, as noted, 48	Mine Tunnel, 96	Cartesian Coordinates, 128	Mine Tunnel, 96
					
Start of Heading, 60	90° Elbow, Threaded, 84	First Generation Offspring, 55 Food and Water Required, 141 v		Below Eye Level, Right, 51 2-Phase 3-Wire, 81	
					
Fuel and Oil Required, 141	Initial Position (Zero), 108 +	Plant Useful to Wildlife, 56	Pre-Wash, 102	Screw Feeder, 80	Table Tilt, 116
					
Frictionless Contact, 128	Important Factory, 93	Pivot (Hinge), 128	Above Eye Level, Left, 51	Beware of Four Dogs, 91	Emergency Road Service, 148
					
End of Text, 60 End of Letter, 63 Meeting of Celestial and Terrestrial, 89		Preset Tapping, 82	Full Level, 107	Reach, Extend, 162 +	Complemented, 61
					
Smoking Permitted, 140	Galvanization, 115	Staggered Junction, 143	Clutch, 108	Aerial, (Antenne), Dipole, 83	Aircraft Badly Damaged, 141
					
All Well, 141 Not Understood, 141 v	Mirror Image, 108	Terminating Set, 71	Office Flexibility, 53	2 and 3-Phase Tee Connected, 81 Telegraph, Telephone Office, 93 "T" Junction, 143	

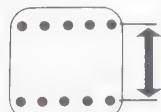
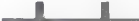
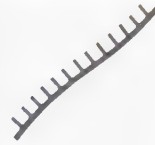
 Dibble, 45 Food Here if you Work, 91 v		 Entering larger waterway, 153	 Monorail, 36	 Sal Alkali, 87	 Hose Bibb, 50
 One, 114	 Take-Off, 151	 Shower Head, 49	 Hoe, 45	 Golf, 132	 Ceiling Mounted Equipment, 115
 You Can Sleep in Hayloft, 91	 Borax, 87	 Borax, 87	 Coolant Fluid, Off, 107 + Drinking Water, 36 v Cooling Pump, 106 v Drinking Water Supply, 153 v		 Heliport, 36 +
 In Action as long as button is operated, 107 Thermostat, 48 v Wireless Telegraph Station, 93	 No Through Road, 146	 Terra Cotta, Architectural, 50	 Limit of Pack-Ice (Month), 93 Telegraph not Along Road, 93 v		
 Perpendicular To, 111 Start of Text, 60 Squareness (Perpendicularity), 85	 Lubricate every 2000 hours, 160	 Captive (Private) Ferry, 153	 Earth (Ground), 82	 Tee Joint, Threaded, 84	
 Side Table Adjustment, 114	 Antimony, 86	 Libra, 89	 Address, 61 Addresses same, 62 v	 Vacuum Tube (Triode), 82	 Rut Loosener, 45
 Side Road, 143	 Landing or Take-Off Direction, 151 Effects Projector, 49 v		 Move Left, 73	 Road Work Ahead, 144	 Dip and Strike, 96
 No Through Road, 146	 End of Transmission Block, 60 Pipe Line Junction, 83 v		 Metal Wheel, 45 + Entrance of Tributary, 153 v		 There Exists, 111 Auxiliary, 62

GRAPHIC FORM

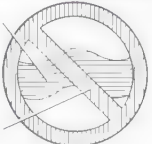
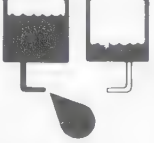


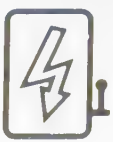
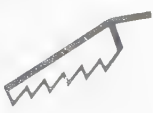


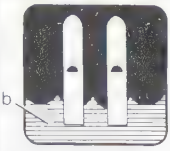
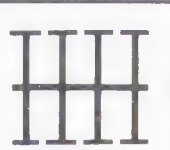
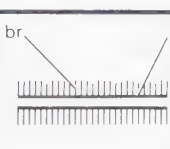
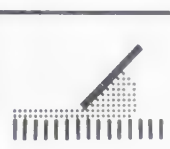
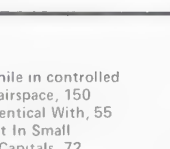
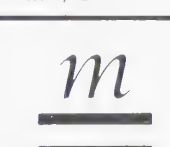
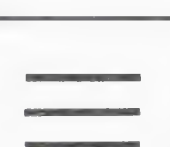
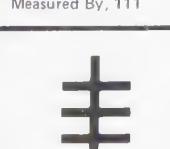
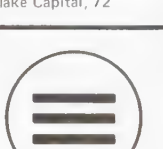
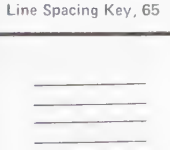
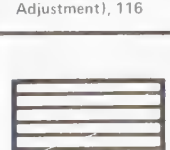
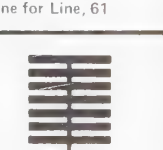
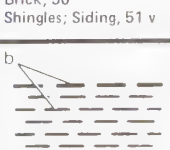
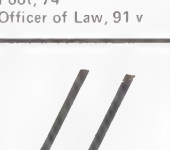
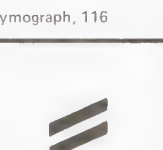
(continued, next page)

(continued) Set In Italic, 72 Direct Current (DC), 81 Negative Polarity, 81 Uninsulated Coupling, 82 Waste Water, 83 Straightness, 85 Flush Contour, 85		Earth, 89 Doubtful, 90 Main Road, 92 Submarine Cable, 93 Cutting Line, 100 Simmer, 102 Minus, 111 Stratus and/or Fractostratus, 121				Center Line, 48 Cold Water, 83 Provincial or State, 92 v Incorporated Village, 92 v					
	Phantom Line, 48 Hot Water Supply, 83 International, 92 + County, 92 v		Hot Water Return, 83 Township, 92 v		Vent Pipe, 84 Hidden Line, 48 Insulated Coupling, 82 Track; Path, 92 v Small Park, Cemetery, 92	Telephone or Pipe Line, 93 Stitching Line, 100 Shorten to Line, 100 + Stitch Pattern, 101 v Fractostratus, 121					
	Measures Rest, 123		Fault (Lateral Displacement), 92		Finished, 60		Jump Perforation, 110 +		Threaded Pipe Joint, 84 Union, Threaded, 84 v Plus or Minus, 111 v		
	Divided By, 111		Wire Fence, 43		Morse Code, 75 +		Reservation, national or state, 92 Route of Explorers, 95 v		Power Transmission Line, 93		
	Land Grant, 92		Explorer Route From Reports, 95		Lateral Punch Control, 110		Drawbar, 45 Narrow Gauge Track, 92 v		Telegraph Along Road, 93		
	Navigable Canal, 93		Breakwater; Pier, 94		Railroad Track, single, 92 +		Outlet, Bare-lamp Fluorescent Strip, 49 Lengthen amount be- tween line and cuff, 100 v		Medium Pressure Steam Supply, 83 +		
	Expand, 65 Fork for Front Loader, 46 v Half Space, 65 v		Barbed Wire Fence, 43		End of Prohibition, 153		Shilling, 58 Divided By, 111 Extensor; Extension, 113 After; After Passing, 150				
	Attitude of Joint, 92		Normal Fault, 92		Hand Brake Engaged, 158 +		Insert Lift Cart Here, 98		Non-Linear Variability, 82		Not (Negation), 60

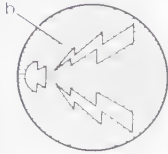
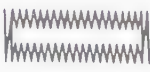
					
Indefinite Integral, 111	Forte (Loud), 124	Blower, Low, 102	Disturbance, 108	Shilling, 58 Sine (Without), 113 v	Dust or Sand Storm, 120
					
Absorptive Transition, 128	Arpeggio; Rolled 7th Chord, 124	Surface to be Machined, 85	Linked Space, 52	Oil, 87	Oil, 87
					
Dollar; Escudo; Peso; Cruzeiro, 58 +	Segno, 124	Distillation, 88	Sunflowers, 39	Tin, 86 Perennial, 56 Jupiter, 54	
					
Section, 58	Treble (G) Clef, 123	Chopper, 46	Tube Current, 115	Recorder, 72	Taoism, Yin-Yang, 139
					
Safe Deposit Boxes, 34	No Stopping, 143	Proportional To, 111	Large Navigable River, 93	Alternating Current (AC), 81	Transpose, 72
					
Turn, 124	Run In, 73	Short Break Line, 48 Flutter (Wind), 124 +	Shoreline, 94 + Falls, 93 v Rapids, 93 v Disappearing Stream, 93 v		Unsurveyed River or Stream, 93
					
Zinc, 105	Rapid Traverse, 106 + Wave, 128	Water, 86	Inductor, 82	Rough or Bumpy Road, 143	Occluded Front, Surface, 121 +
					
Slight Freezing Drizzle, 120	Spring, 93	Continuity between 2 points, 52	Liquid Manure, 41	Chicken, 42	Fuse, 82

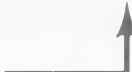
					
Visibility reduced by smoke, 120	Frequency, additional measuring, 71	Congruent, 111	Document, 59	Tracer, 106 +	No Horn Blowing, 145
		Sequence, 61 Beginning of a Sequence, 62 v Spark Gap Current, 115 v			
Continuously, 61			Water, 157 +	Alternating Current Source, 82	Float, (Hydraulic Lift), 157
					
Cistern, 43	Generator, 71	Biodegradable, 102	Keep Dry, 98	Processing Machine, 71	Cold Spring, 130
					
Dam, 131	Caution: Deep Water (Drop-off), 131	Fuel Tank Selector, 158	Invert Type, 73	At; To, 58	Spin-Drying, 103
					
Cigarette Lighter, 159	Cotton Blowing Fan, 161	Dust Whirls, 120 Judge Lives Here, 91 +	Rotation, 113	Circumduction, 113	Vehicle Overturned, 142
					
Eject, 63	Project, 126	Starter, 159	Centrifugal Fertilizer, 47	Fire Hose, 141	Don't Extinguish with Water, 141
			End of Transmission, 59 Communication Link, 59		
Torque Converter, 161	Centrifuge, 114	Ammeter; Generator, 159			Electrical Danger, 140
	Overhead Cable Crossing, 153 Use Flash, 126				
	Series of Bends, 143		Double Bend, Right, 143 +	Overhead Cable, 144	
					Static Eliminator, 110

					
Thunderstorm, 120	Food Here If You Work, 91	Telegrams, 70	Ignition On, 158	Electric Facilities, 140	Main Switch, 107
					
Controller Chart Drive, 108	Climbing Plant, 56 +	Vertical Feed, 106	Spotlight, Fresnel, 49	Root Cutter, 46 Pulper, Mixer, 46	Reboiler, 80
					
No, 141	Engineer Required, 141	Absolute Magnitude, 54 Misc (Mix), 113 v Maintain, 151 v	Swamp Plant, 56 Resistor, 82 v Barking Dog Here, 91 v Stitch Pattern, 101 + Feed, 106 Parking Restriction, 150 v		
					
Agitate, 103 Tungsten, 105 v	Creeping Plant, 56	Longitudinal Feed, 106 + Adjustable Contact Resistor, 82 v Feed Rate Per Cent, 106 v	Feed Start, 106 Mordent, 124 v		
					
Feed Hold, 106 +	Check Valve, 84	Long Break Line, 48	Heat Sealing, 104 +	Separation, 88 Scorpius, 54, 89	Borax, 87
					
Presser Foot Pressure, 101	Cutter Bar, 161	Binder, 46	Narrows, 52	While in Control Zone, 151	Faradization, 115
					
Correct Outline, 73	Saw, 45	Electric Knife, 102	Underpass or Bridge, 147	Parallel To, 111 Primary Homonym, 55 Merged In, 56 Square Groove, 84 The Sky is the Limit, 91 v Take In Pants Leg, 100 Final Bar, 123 v	
					
Magnitude, 112 Measure, 123	Narrow Bridge, 144	Tornado (Funnel Cloud), 120	Instructions To Secretary, 63 Flanged Pipe Joint, 84 v Moderate Limitation, 113 v		Broken Clouds, 121 Isolated, Absolute, 60 v

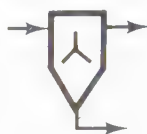
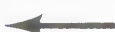
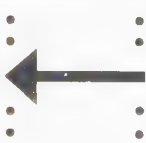
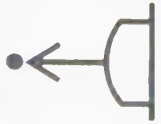
 Water Skiing, 131	 Active Intellect, 89	 Magnetic Ink Characters, Customer Account Number, 58 Amount of Check, 58 v Dash, 58 v	 Let Out (Pins Outside), Take In (Pin Out Ex cess), 100		
 Loose Straw, 39 + Sheaf, 39 v	 Crumbroll, 46	 Chaff, 39	 Repeat, 124	 Furrow Press, 46 Rotary Hoe, 46 v	 Rake, 45 + Chassis, Equip., 82 v
 Windrower, 46	 Fence, 51	 Harrow, 46	 Chain Harrow, Weeder, 46	 Railing, 51 Weir, 153 v	 Moveable Grid, 116
 Longitudinal Wave, 128	 Levee (with road), 94 Access Denied, 92 v	 Spreading, 104	 While in controlled airspace, 150 Identical With, 55 Set In Small Capitals, 72 Dam with Road, 93 v	 Lengthen and Shorten Lines, 100 Low Heat, 102 Laminating, 104 Equal To, 111 Light Fog, 120	
 Measured By, 111	 Knee, 74 Not Equal To, 111 v Cross Airway, jet route or course, 150 v	 Heavy Fog; Ice Fog, 120 Line Feed, 60 Make Capital, 72 Symmetry, 85 v Passive Intellect, 89 Medium Heat, 102 Identically Equal To, 111	 Make Capital, 72		
 Ankle, 74	 Line Spacing Key, 65	 Layer Level (Body Adjustment), 116	 Mechanical Barn Cleaner, 43	 Screened Conductor, 82	 Line for Line, 61
 Paved Area, 51	 Staff, 123	 Brick, 50 Shingles; Siding, 51 v	 Foot, 74 Officer of Law, 91 v	 Toes, 74	 Kymograph, 116
 Negative Charge, 128	 Silage, 39	 Inundated Area, 94	 Parallelism, 85 Align Type, 73	 Straighten Type, 73	 Tremolo, 124

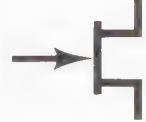
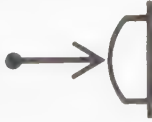
Cylindricity, 85	Repeat 2 Measures, 124	This Is Not A Safe Place, 91	Severe Limitation, 113	Delete, 60	You'll Be Cursed Out, 91
				Face Brick, 50 + Natural Ashlar, 50 v Natural Rubble, 50 v Cast Stone, 50 v Metal, Large Scale, 51 v	
Air Vane, 107	Road Closed, both directions, 146				
			Fracture, 114 Secondary Homonym, 55 Number, Pound, 58 Non Add, 64 Insert Space, 72 Diaphragm Closed, 116 v		
Slate, 50 Terrazzo, 50 v	Ice Hockey, 137 +			Sharp, 124 G major; E minor, 125 +	Let Out Pants Leg, 100
Grade Crossing with Gates, 144	Crime Committed, not safe for strangers, 91	Jail, 91	Micro-Memory, 61	Dung, Urine, and Water Mixture, 41 Insulation, Solid, 50 v Cork (Linoleum), 51 v	
Volleyball, 135	Occupational Therapy, 117	Fortissimo, 124 Noisy Area, 52	Drying, 103	Blower, 102 +	Steam, 107
Atomizer, 47	Heater Regulator, 159 +	Terra Cotta, Un-glazed, 50 + Tile, Encaustic, Faience, or Ceramic, 50 v Brick-Cotta, 50 v Concrete Block, 50 v Insulation, Loose, 50 v Loess, 97 v		Audio Frequency AC, 81 Approximately Equal To, 111	
Don't Cause Wash, 153	Aquarius, 54, 89	Punched Tape, 59	Water, 86	You Can Sleep in Hayloft, 91	Open Shade, cloudy dull, 126
Bright or Hazy Sun; Sand; Snow, 126	Drawbridge, 144	Transformer, 82	Superaudio Frequency AC, 81	Active Intellect, 89	Cloudy Bright, no shadows, 126

 Quayside or River Bank, 144	 Water Polo, 135 Rowing, 135 v Canoeing, 135 v	 Water Sports Area, 131	 Pulp, 39	 Electric Fence, 43
 Sound Horn, 147	 Button Hole, 101	 Water Plant, 56	 Coolant, 157	

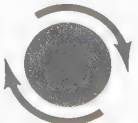
 Gas Expelled, 67 No Entry (All Vehicles), 145 v Climb and Maintain, 150	 Norway Spruce, 44 +	 Adjustable Tapping, 82	 Move to port side of channel, 152	 Climbing Plant, 56	
 Absorptive Transition, 128	 Am Proceeding in this Direction, 141	 Farmstead, 43 Tower Silo, 43 + Unit Shift, 72 v Lodgings, 130 v	 Sommersault Forward, 74	 Particle Spin, Magnetic Dipole, 128	
 Merging Traffic, 143 +	 No Lane Changing, 145	 Move Up, 73	 Tab Set, 64	 Above, 150	 Spin (Rotation), 128
 Carrier Frequency, 71	 Proceed, 156	 Hangars, 38	 Hotel, 35	 Indoors without Flash, 126	 Unlock, 116
 System Devices, Watchman, 49	 Uranus, 54	 Stationery, 65	 End of 2-Way Traffic, 146	 Snowmobile Trail, Direction, 132	 Signal Generator, 71



	 Precipitation, 67 Descend and Maintain, 150			 Hanging Plant, 56 Radiative Transition, 128 v	
Warming Hut, 132			Electrical Danger, 140		
					
Shift Lock, 64	Somersault Backward, 74	Move Down, 73	De-Jam Key, 64	Line Spacing Key, 65	Kymograph, 116
	 Cereals, 39 + Wheat, 39 + Loose Grain, 39 v			 Centrifuge, 80 Barometric Condenser, 80 v Single-Effect Evaporator, 80 v Thickener, 80 v	
Barley, 39			Rice, 39 +		
					
Entrance Connector, 59 +	Lock, 116	Roller Crusher, 80	Add, 114	Drain; Pump, 102	Cooling Tower, 80
					
Spray Dryer, 80	Low Align, 72	Down; Lower, 157	Filter, Air, 157	Registration, 117	Fallow Land, 44
 Proximal, 113 Direction of Stitching, 100 Reverse, 126 v		 Backspace; Carriage Return, 64	 Left Bend, 143	 Display, 59	 Reverse Counter, 72
					
Move Left, 73	Dictation, 63	Direction Sign, Non- illuminated, 48	Exit, 34	Engage; In, 157	Nearside Lane for Left Turn only, 146
				 Backward, 60 Right-Hand Minus Terminal, 115 v	
Compression, 116	Feed, 63	Ribbon Rewind, 64	Proceed in Direction of Arrow, 148		

	 Moving Car, Van or Motorcycle, 142 Pedestrian Access, 52 Reaction Direction, 67 Line Fill, 72 v Continuous rectilinear motion, 105			 Intended Movement, 142 Essential Sight Line, 52	
Review, 63					
					
Tab, 64	Implies, 111	Moving Bus, Truck or Tractor, 142 +	Turn Right, before landing, after take-off, 151		Right Bend, 143 No Right Turn, 145 v
					
Turn Right (Signal), 157	No Crossing by Vehicles, 145	Out of Control, 142	Photon, 128	Skidding, 142 Creeping Plant, 56 v	Directional Sign, wall or ceiling, 48
					
Move, 73	Facing Direction, 52	Move Right, 73 Limited rectilinear motion, 105		Abeam (Abreast), 150	Playback, 63
					
Stopped Car, Van or Motorcycle, 142	Data Clear, Out, or Reset, 108	This Way, 90	Vehicle Overturned, 142	Through Control Zone, 151	Disengage; Out, 157
					
Entrance, 34	Entrance, 34	Vista, 52	Transistor, Field-effect (n-channel), 82	Decompression, 116	Transmitter, 71
					
Reciprocating Pump, 80	Sliding Roof, 160	Primer Pump, 158	Stop, 156	Water Spray, 107 +	Spectro-Photometer, 114 +
					
Converter, 71	Quick-Release Coupler, 161	Excess Lag, 108	Forward; Way Clear, 60	Start Operation (Way Clear), 60	One Way, 146

GRAPHIC FORM

	Caution: Red Light Soon, 148 Stop, 148 v		Emergencies, 117		Signal Generator, 71		Recording Head, 82 +		Tape Forward, 108 +
	Departing Flights, 37		Pressure Gauge, 84		Variable Control, 81 + Run-Out, 85 Vector, 128		Sagittarius, 54, 89		Iron, 86
	Serial Vision Sequence, 52		Cleared to Leave Control Area, 151		Approach, 156		Neuter Hermaphrodite, 55		Iron, 86
	Escalator, Up, 34 +		Remote Control, 63		Cleared to Enter Control Area, 151		Sling Here, 98		Lightning, 120
	Thunderstorm, 120 +		Hoist Raised, 161 +		Backspace, 59		Continuous Rotation, 106 +		Reverse Course, 150
	Turn the Page, 58		Reverse Stitching, 101		Spark Advance, 158		Rotation about the Bond, 67		Change Speed only in stopped position, 106
	Film Thread, 126		Transfer, 114		Spool Release, 63		Backward, 60		Return Travel, 60
	Rotation in 2 directions, 106		Sensitivity, 63		Lighten, Darken, 127		Overturned Anticline, 96 +		Rotary Motion, 116
	Interrupted Rotation, 106		Limited Rotation and Return, 106		Rotational Casting, 104		Windshield Wiper, 159		Oscillating rotary move- ment, continuous, 106

	Traffic Circle Ahead, 143 Circulating Inside Air, 160 v Traffic Circle, Compulsory, 146 v		Torque Converter, 161		Mix, 114		Auto Nature Trail, 131		Absolutely No Overtaking, 153 +		
	This Way Up, 98		No Passing, 145		European Silver Fir, 44		Film Feed, 116		Form 2 Lanes of Traffic, 146		Trails Merge, 132
	Lane for Slow Traffic, 146		Pass Either Side, 143		Cutting Plane, 48 Fold Grain, 100 v		Thermoforming, 104		Photo Sensitivity, 83		Ball Mill, 80
	Oscillating Motor, 83		Overflow, 60 Overflow T, 62 v		Power Lift, 46		Direction of Control Lever, 157		Longitudinal Motion, 116		Selective Band correction in level, 71
	Layer Level (Body Adjustment), 116		Windows, Up and Down, 160 +		No Passing or Overtaking, 153 Priority for oncoming traffic, 145 v Keep to Port side of channel, 153 v Two-Way Traffic, 143		Divided Road, Begins, 143 +		Cross Channel to Port, 153 +		
	Fast Forward Movement, 63 +		Heavy Truck and Trailer, 142		Towed and Towing Vehicle, 142		Interrupted rectilinear motion, 105		Connector, 83		Collision, Rear End, 142
	Sideswipe, Overtaking, 142		Hit The Road! Quick!, 90		Blower; Fan, 80		Blowing Unit, 107		Straight Grain; Grain Line Justify, 72 v Rectilinear motion in 2 directions, 105 Ice Prisms, 120		
	Transverse Motion, 116		Dimension Line, 48 Alter to Size Indicated, 73 v		If and Only If, 111		Speed Control, 63		Footplate Motion, 116		

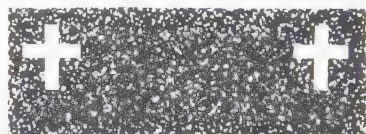
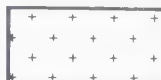
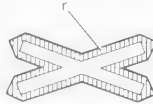
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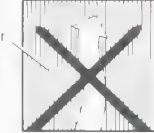
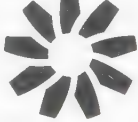
Reversing, 142	Margin Reset, 64 +	Unlock, Unclamp, 107 Space Expand, 65 v	Margin Release, 64 +	Unlock, Loosen, 157	Load, 127
Radio Station Selector, 159	Vertical Motion, 116	Anticlinal Fold, 96 Synclinal Fold, 96	Stairs, Up and Down, 34	Steam Pressure, 107	Arena Diameter, 53
			Focus, 126 Reposition Indicator, 65 v Lock; Tighten, (Chuck Closed), 107		
Moveable Grid, 116	Center, 72			Collision, Head-On, 142	Lock; Tighten, 157
			Reversible Reaction, 67 2-Way Traffic, 143 v		
Brake Oil Pressure, 158	Vacuum, 107			Limited rectilinear motion & return, 105	Sideswipe, Head-On, 142
	Oscillating rectilinear motion, continuous, 105				
		Drifting Snow, slight to moderate, 120 +	Nearside Lane for Left Turn only, 146	Collision, Broadside, 142 +	Origin Offset, 108 +
Water Cooler, 80	Plunging Anticline, 96 +	Air Pressure, 157	Unlock, Unclamp, 107	Structural Dome, 96 +	Automatic or Semi-automatic cycle, 108 +
			Scattering, Compton, 128 Scattering, Electron-Proton, 128 v		
In Position, 108	Rendezvous Point, 34			Heat Exchanger, 80	Reboiler, 80
Electric Eye (Beam Source), 49	Circulating Outside Air, 160	Compressed Gas, 157	Community Projects Two-Sided, 53		

	Plus, 111 Longer Than, 55 Graft Hybrid, 56 Spores with Male Nuclei, 56 On, 64 Tab Set, 64 Positive Charge, 67 Hip, 74 v	Crossed Conductors, 81 + Cross; God and Earth combined, 89 Mild, 113 Stopped Tone (Horn), 125 Intersection; Cross-roads, 143 v		Crucible, 86		Christianity, Latin Cross, 138 Religious Talk gets Free Meal, 91 v	
	Crossing Tributary, 153 + Intersection with non-priority road, 143 v		Cross-Channel Fairway, Left Bank, 154 + Lubrication Oils A and B, 108 v Red Cross, 113 v		Vinegar, 87 Cross Joint, Threaded, 84 v		
	Airport, 36 Small Airport, No Facilities, 93 v Low Flying Aircraft, 144		Obscure Species, 56 Incorrect Citation, 55 Dagger (Footnote), 58 Death, 113		Sikhism, Kirpan, 139		Staggered Junction, 143
	Christianity, Orthodox Cross, 138		Christianity, Celtic Cross, 138		Reception of Cadavers, 118		Injections; Vaccination, 113
	Pharmacy, 65		Nothing to Declare, 38		Mirror Image, 108		Hinduism, Mandala, 138
	Doctor Here, Won't Charge, 91		Above, 150 +		Larch, 44		Return to Segno, 124
	Position, 85		Lead, 87		Cathedral; Church, 95 +		Antimony, 86
	System Devices, Electric Clock, 49 +		Powder, 86		Mercury, 87		Neuter Hermaphrodite, 55
	Food Here If You Work, 91		Floor Mounted Equipment, 115		Autumn, 89		Calx (Viva), 87 +
	Neptune, 54		Size of Button and Buttonhole, 100		Christianity, Christ Victorious, 138		Volunteers, 117
	Injury, Fatal, 142		Building, Medium, 51				



GRAPHIC FORM

					
Hospital, 117	Quarantine, 44 Hospital Heliport, 151 v	Airport, Civil or Military, 93	Power, 63	Observation Desk, 37	Clinic, 117
					
Jerusalem Artichoke, 40	Ambulance, 117	Emergencies, 117	Hospital, 147	Christianity, Church of Christ, Scientist, Cross and Crown, 138	
					
Double Dagger (Footnote), 58	Normal; Moderate, 113	Low Pressure Steam Return, 83	Glider Flights in Operation, 151	Parking Space Limits, 150	
					
Increased; Moderately Severe, 113	Barbed Wire Fence, 43	Markedly Increased, Severe, 113	Loose Fertilizer, Non- Granulated, 41	Fertilizer in Bags, 41	Positive Charge, 128
			Hybrid, 56 Mated With, 55 Off, 64 Line Kill, 72 Broken Type, 73 2-Phase 4-Wire, 81 Vinegar, 87		
Marble, 97	Massive Igneous Rock, 97		O. K., All Right, 90 v Mining Prospect, 95 v Multiplied By, 111 Intersection; Cross- roads, 143 v Cross, 151 v		
	Unable to Proceed, 141 Unfit for Aircraft Movement, 151 v Cross-Channel Fairway, Right Bank, 154 +				
	Error; Malfunction, 108 Mild Limitation, 113 v		Railroad Grade Crossing, 146 +	Welded Pipe Joint, 84 Starlike Snow Crystals, 120	
				Cutting; Shearing, 104 Cutting Line, 100 v Unwrapped (Sterilizers), 114 v	
Grade Crossing (Railroad), 144	Crucible, 86 +	Placer Mine, 96		Salt, 87	
					
Punch Inhibit, 72	Fresh Water, Safe Campsite, 90	Flashing Light Ahead (Railroad), 144	The Family, 90	Mine; Quarry, 96 Scissors, 45 v Battlefield, 95 v	

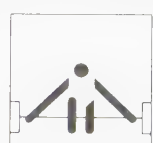
					
Gravel Pit, 96	Fencing, 134 +	Restaurant, 35 Silverware, 66	Character Kill, 72	Railroad Grade Crossing, 146	Barber, 65
					
No Smoking, 36, 140	Half Standard, 40	Christianity, Chi Rho, 138	Use No Hooks, 98	Poison, 140	Windmill, 95, 43 v
		Waist, 74 Code, 61 v Lead, 105 v			
Fixation, 88			Overcast, Sky Obscured, 121	Baseball, 132 +	Noxious, 99
					
Magnetic Tape Unit Occupied, 62	Rowing, 135	Hockey, 136	Canoeing, 135	Trail Closed, 132	Audio-Visual Indicator, 72
	Total, 64 Star, 54 v Described Well in this Source, 56 v Asterisk (Footnote), 58 v Snow, 120 Release Damper-Pedal (Piano), 124 v		Instruction to Secretary, 63 Digging Reel, 45 Point of Reference, 52		
				Biohazard Warning, 140	Fan, 126
					
Gold, 86	Winter Sports Area, 132 +	Air Conditioning, 159	Panorama, 52	Grasses, 40	New World, 56 + So. Hemisphere, 56 +
					
Ventilator, 43	Header, 160 Reel Speed, 161 v	Bare Rock, 94 +	Snow, 148	Taoism, Water; Life-giving Source, 139	Cool, 114
		Radioactive, 115 Ionizing Rays (Radiation Warning), 140			
Medical Alert, 113			Ventilating Fan, 160	Ventilation Control, 35	Fallout Shelter (Civil Defense), 140

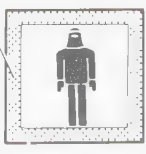


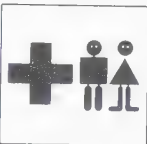
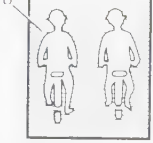


				Protection and Safety Equipment, 141 Night Position (Rear View Mirror), 160	
Choke, 158	Public Helipoint, 151	For Entering The Number, 109			Judaism, Star of David, 139, 113 v
					
Birth, 113	Magnesium, 105	Position of Light, 155	Synagogue, 95	Capital City, 92	Dressing Rooms, 117

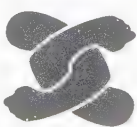
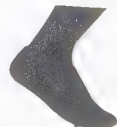


	Men's Toilet, 34 Men's Suits, 66 v Men, 15 years and up, 99 v Still, 126		Women's Toilet, 34 Stewardess Call, 36 Women's Wear, 66 v Women, 15 years and up, 99 v Dresses, Skirts, Blouses, 99 v		Men's Work Clothes, 66		Suits, Trousers, Jackets Shirts, 99 +				
	Girls' Clothing, 66		Lost Child, 34		Boys, 4-14 years, 99		Girls, 4-14 years, 99		Casts, 118		Pedestrian Crossing, 144
	Boxing, 134 Fencing, 134 v		Confucianism, Confucius, 138		Figure Skating, 137 Gymnastics, 134 + Track and Field, 134 v		Hinduism, Shiva, 139		Weight Lifting		
	Track and Field, 134 + Basketball, 135 v Hockey, 136 v		Speed Skating, 137 Soccer, 136 v Biathlon, 137 v Ski Jumping, 137 v		Swimming, 135		Stop-Go Control Ahead, 144 +				
	Men's Cloakroom, 34 + Public Health, 38 v Access for the Ambulant, 140 v		Ranger Station, 130		Sundries, 65 Baggage Claim, 37 + Oversize Luggage, 37 v		View or Camera Point, 130				

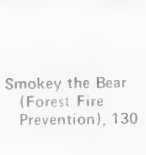
				Forward, 126 + Pedestrians Keep Left, 145 v Pedestrians May Cross, 148 v		
Virgo, 88	Hiking Trail, 130	Barman, 35				Return to Seat, 36
						
Fording Place, 130 Foot Bridge, 130 v	Hinduism, Vishnu, 139	No Handcarts, 145	Porter, 37	Physical Therapy, 117	Sagittarius, 89	
						
Buddhism, Buddha, 138	Road Work Ahead, 144	Cycling, 136 + Physical Therapy, 117 v Ski Bobbing, 132 v		Ski Track, 132 + Ice Skating, 133 v Cross-Country Skiing, 137 v		
						
Soccer, 136 Canoeing, 135 v Volleyball, 135 v Wall Contact Sports, 136 v		Slalom, 137 + Towlift; T-Bar, 132 v Hockey, 136 v Ice Hockey, 137 v Down Hill Skiing, 137 v		Diving, 131 Scuba Diving, 131 v Sledding, 132 v		
						
Slippery, 140	Rowing, 135 Canoeing, 135 v Sailing, 135 v Luge, 137 v		Access for the Handi- capped, 140, 117	Chair Lift, 132 + Water Skiing, 131 v	Switchboard and Sound, 70	
						
Blood Donors, 117	Waiting Room, 37	Watch for Work Vehicles, 140	Place Luggage on Floor, 36 +	Seat Occupied, 36	Maid, 35	
				No Entry (Keep Out), 34 Passengers Only, 37 v No Entry to Pedestrians, 140 v		
Room Service, 35	Bellboy, 35	No Entry (Keep Out), 34 +		No Entry (Keep Out), 34 Passengers Only, 37 v No Entry to Pedestrians, 140 v		Ladder Off Limits, 140 No Riding, 140 v
						
Men's Toilet, 34 +	Men's Shower, 35 +	Connecting Flights, Domestic, 37 +	Open Pit, 140 Slippery, 140 v	Wear Protective Clothes, 141	No Pedestrians, 147 +	

 Sauna Bath, 35	 Self-Guiding Nature Trail, 131	 Pedestrians Must Wait, 148	 Children Can Play in Street, 147	 Caverns, 131	 Emergency Exit (Escape Route), 140
 Groups, 126	 Child Care, 117	 Pediatrics, 117	 Maternity, 118	 Observation Room, 119	 Gemini, 88
 Children Crossing, 144 +	 Swimming, 135 Rowing, 135 v	 Wrestling, 134 + Judo, 134 v	 Rendezvous Point, 34	 Passenger Check-In, 37	 Toilets, 34 Toilets Occupied, 36 v
 Children's Emergency, 117	 Basketball, 135 Wrestling, 134 v	 Camera/Subject Distance, 126	 Playground, 130	 Information, 34	 Clinical Room, 117
 Compartment, Mothers and Children, 38 Waiting Room, Mothers and Children, 37 v	 Visitors, 117	 Taking of Specimens, 118	 Nursery, 118	 Auditorium, 131	
 Child Care Education, 119	 Out-Patient Department, 117	 Registration, 117	 Admissions, 117	 Keep Away from Children, 140	 Compulsory Way for Pedestrians, 147
 Parallel Riding Permitted, 147	 Elevator, 34 +	 No Standing, 140 +	 Planned Parenthood, U.S.A., 114	 Close-Up, 126	 Physical Therapy, 117
 Judo, 134	 Bronchoesophagology, 118	 Height, High, 70 + Size, Large, 70 + Contrast, High, 70 +	 Chest Care, 118	 Neurology, 118	

					
Sweaters, Sweat-shirts, 99	Should be Drip Dried, 101	Textile Processing, 104	Men's Sweaters, 66	Outer Garments, 103	Synthetic/Cotton Mixture, 103 +
					
Tricot (Knitted), 103	Baby Clothes, 103, 66 v	Underwear, Socks, 99	Dainty Clothes, 103 Lingerie, 66 v	Men's Shirts, 66	Should Be Dried Flat, 101
				 Volleyball, 135 Boxing, 134 v Water Polo, 135 v Swimming, 135 v	
Strollers, 34	Row Boating, 131	Snowmobiling, 132	Customs, 38		
	Shooting, 136 Hunting, 132 v Fencing, 134 v				
		Archery, 132	Aquarius, 89	Weight Lifting, 134	Shooting, 136
					
Washing Facility, 130	Bobsleigh, 137	Phoniatrics, 118	Otorhino-laryngology, 118	Electroencephalography, 118	Mental Hygiene, 118
	Head of Phoniatrics, 118 Neurosurgery, 118 v Senior Nurse, 117 v				
		Wear Ear Protection (Noise), 141 +	Wear Gas Mask, 141	Headgear, 66	Wear Helmet, 141
					
Beauty Parlor, 65	Drinking Fountain, 36	Poison, 140	Speech and Hearing, 118	Wear Helmet, 141	Press Interview Room, 70
			Hand Control, 108 Manual Data Input, 108 v Start, 114 v		
Shower, 35	Group Room, 70				Corrosive, 99

	No Entry (Keep Out), 34 Stop, 114 v First Aid, 140 v		Boxing, 134		Continued Index, 58		Wash By Hand, 101 + Dermatology, 118 v		Gloves, 66
	Thin Ice, 133		Light Manufacturing, 104		Customs, 38		Gymnastics, 134		Maintenance, 104
	Wrapped (Sterilizers), 114		Washroom, 34		Used Cups, 35 + Sanitary Napkins, 35 v		Stop, 143		No Entry, 140
	Do Not Touch, 140		Pack with multipurpose grease, 160		Break Matches, 130 v		Press Room, 70		Sharp, 140
	Do Not Start, 140		Prayer, Meditation, 117		Currency Exchange, 37		Wear Gloves, 141		Fasten Seat Belts, 36
	Handle with Care, 98		Travel Insurance, 37		Planned Parent-hood, Korea, 114		Information, 34		Orthopedics, 118
	Swimming, 135		Weight Lifting, 134		Wall Contact Sports, 136		Wrestling, 134		Weight Lifting, 134
	Socks, 66		Track and Field, 134		Shoes, Boots, Sandals, 99		Orthopedics, 118		Men's Shoes, 66
	Ladies' Shoes, 66		Remove Shoes on Evacuation Slide, 36		Foot Switch, 108				

					
Foot Pedal for Water, 35	Wear Boots, 141	Pedestrian Crossing, 147	Hosiery, 66	Hiking Trail, 130	Floor Heat, 159
					
Nature Trail, 130	Buddhism, Buddha's Footprint, 138				

					
Silkworm, 42	Rabbit, 42	Slow, 157	Bear Area, 131	Fast, 157	National Wildlife Refuge, 95
					
Wild Animal Crossing, 144 Deer Area, 131	Animal Crossing, 144	Free Telephone, 91	Kind Lady Lives Here, 91	Dogs Allowed, 130	
					
Pediatric Clinic, 117	Sagittarius, 89	Aries, 88	Taurus, 88	Capricorn, 89	Leo, 88
					
Scorpio, 89	Pisces, 89	Cancer, 88 Oncology, 118	Taurus, 54, 88	Horse Trail, 131 Equestrian, 136 v	Modern Pentathlon, 136 +
					
Staff of Aesculapius, 113	Caduceus; Staff of Hermes (Mercury), 113	Christianity, Descending Dove; Holy Spirit, 138	Smokey the Bear (Forest Fire Prevention), 130	Smokey the Bear (Forest Fire Prevention), 130	Sparky the Fire Dog (Fire Protection), 130



GRAPHIC FORM

 Christianity, Agnus Dei, 138	 Christianity, The Fish, 138	 Red Lion and Sun, 113	 Nursery, 34	 Horse Trail, 131 Knight, 133 Equestrian, 136	
 Veterinary Services, 113	 No Animal-Drawn Vehicles, 145	 Stable, 131	 Bridle Path, 147	 Kennel, 130	 No Dogs, 130
 Keep Frozen, 98	 Insecticide, 41				

Although this book is primarily a collection of *graphic symbols*, color often plays a vital role in their message. Consequently we have deviated from our premise and have included a glossary of the symbology of *color*.

Graphic symbols often make use of colors to intensify their meaning — in fact in some instances a change of color creates a diametric change of meaning. For example, a red octagon used as a traffic symbol says STOP; but when the British port of entry switches the color to green, it means permission to pass through customs unchallenged (nothing to declare). There are many other examples which show that color takes an important place in international symbolic communication. An obvious one is the red, yellow, and green traffic lights used the world over; and red on road signs always means NO or DON'T, whereas blue means YES or DO.

Color creates instant impact. Whether applied to a three-dimensional form or used graphically, it becomes a vital part of the first impression created; this is true of the exterior color of a skyscraper as well as an artist's painting. Indeed, one's attention is often captured by color before the form or composition is completely distinct.

Industry employs color coding in many areas. The countless wires in a complex cable are instantly traced by their hue; pipes in factories are color-coded to indicate what each contains; the colors of knobs and buttons on vehicles and machinery signify what they control; office filing is simplified by the use of colored forms, folders, and clips. Even trades may be sorted out by color; various colored hard hats are sometimes worn by workers in construction projects to pinpoint their particular

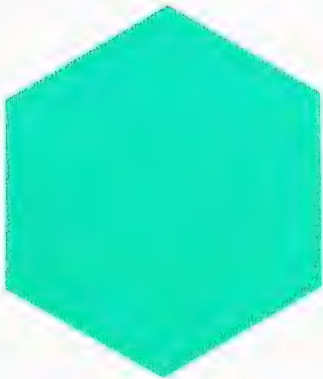
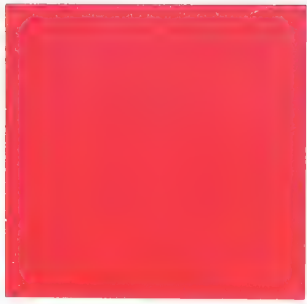
occupations — and a spectacular mobile mosaic results as the men climb about the girders.

Although many authoritative studies have been published, we found no single source which explained the traditional and contemporary meanings of specific colors in specific contexts — and these vary widely in different cultures. Nor could we find material divided according to *color*, rather than subject.

The listing on the following pages is presented with real humility; both time and space preclude its being all-inclusive, for the subject clearly deserves many years of research and volumes of its own. But our selection has been made considering primarily the needs of those who have the task of selecting colors for a given environment, structure, product, sign, or other graphic design.

We are indebted to Faber Birren for permission to use his geometric forms to symbolize the first six colors listed and also for the interesting information that, although these geometric forms were original with him, he discovered sometime later that Wassily Kandinsky had made very similar associations of forms and colors — an example of coincidence of ideas so prevalent in basic thinking. As a matter of convenience in organizing this Section we have assigned shapes to the remaining colors as well.

The meaning of color has interested men from all cultures throughout the centuries — from the royal purple robes of ancient Greece to the red carpet we roll out for diplomatic occasions. The robe and the carpet each signals its special message by virtue of its color; take away the color and the message is gone.





POSITIVE ASSOCIATIONS

Blood (life), fire (warmth), passion, sentiment, valor, patriotism, revolution, Christ, liberty

NEGATIVE ASSOCIATIONS

Blood (spilled), fire (burning), death throes and sublimation, wounds, surging and tearing emotions, passions, war, anarchy, revolution, martyrdom, danger, the devil

ALCHEMY

Third stage: Sulphur, passion

ART

Chinese Art:

Black on red: Happiness
Gold on red: Special happiness
Red on blue: Old mourning
Red on green: Happiness
Red on white: Important notice
Red on yellow: Royal
White on red: Good luck

Persian Rugs: Joy, life, happiness

ASTROLOGY

Temple of Nebuchadnezzar: Third level of building, devoted to Mars

Early Zodiac: Mars, ruling Aries and Scorpio

CULTURE COMPARISONS

American Indian: Masculine, day
Cherokee: Success and triumph
Hopi: Sun god

China: Worn by emperor to worship the sun; coral button on cap worn by first ranking officials; visiting cards traditionally red, color of joy and festive occasions
Season: Summer

England: Color of the livery of the royalty

France: Red kerchiefs worn around necks by aristocrats in post-guillotine days

Japan: Fighting, anger, danger, permissive

Theater: Used as a warm and attractive color (as an opposite to blue)

United States:

Red rose: Love

↪ 238



POSITIVE ASSOCIATIONS

Fire and flames, marriage, hospitality, benevolence, celestial fruit, pride and ambition, earthly wisdom

NEGATIVE ASSOCIATIONS

Malevolence, Satan

ASTROLOGY

Temple of Nebuchadnezzar:

Second level of building devoted to the planet Jupiter

EDUCATION (doctorate hoods)

United States:

Apricot: Nursing
Maize: Agriculture
Orange: Engineering

ELECTRICAL ENGINEERING

Chassis wiring: Screen grids and second transistor bases

GEMS

Jacinth: Modesty, cures heart ailments

HANDLING OF GOODS

Inter-Governmental Maritime Consultative Organization shipping labels: Explosives, fireworks

HERALDRY

Tinctures:

Tenne: Strength and endurance

HOLIDAYS

Thanksgiving, Halloween

MEDICINE

Anesthetics (Sweden): Cyclopropane

METEOROLOGY

Weatherfront markings on maps: Intertropical convergence zone

MUSIC

Instruments:
Brass

↪ 239



POSITIVE ASSOCIATIONS

The sun, light, illumination, dissemination and comprehensive generalization, magnanimity, intuition, intellect, supreme wisdom, highest values, divinity, ripening grain

NEGATIVE ASSOCIATIONS

Treachery, cowardice

Saffron: Debauchery, malevolence, impure love

ART

Chinese art:

Black on yellow: Religious
Blue on yellow: Old mourning
Gold on yellow: Special happiness
Red on yellow: Royal
White on yellow: Buddhist
Yellow on black: Old man's death
Yellow on blue: Divine
Yellow on green: First class
Yellow on white: Holy

Chinese, Thai, Vietnamese, and Malaysian rugs: Royalty

Persian rugs (cream): Modesty

ASTROLOGY

Temple of Nebuchadnezzar: Fourth level of building devoted to the Sun

Early Zodiac: Sun, ruling Leo

CULTURE COMPARISONS

American Indian: Masculine
Arapaho: Feminine

China:

Dynasties: Ch'ing (1644-1911)

Only the emperor could wear yellow; worn by the emperor to worship the sky

Earth, honor, imperial dignity

Egypt: Happiness and prosperity

France (10th century): Doors and abodes of criminals, felons, and traitors

Japan: Childish, gay

Jews: Forced to wear yellow by Venetians and Hitler

Spain (medieval): Yellow as part of the executioner's costume stood for the accused's treachery

DIRECTION (cardinal points)

Apache, Navaho, Omaha, Sioux: West

↪ 240



POSITIVE ASSOCIATIONS

Vegetation, nature, fertility of the fields, sympathy, adaptability, prosperity, hope, life, immortality, youth, freshness, auspicious, recognition of soul, wisdom

NEGATIVE ASSOCIATIONS

Death, connecting link between black mineral life and red animal life; lividness, envy, jealousy, disgrace, sinister, opposition, moral degradation, madness

ART

Chinese Art:

Blue on green: Women's colors
Red on green: Happiness
Yellow on green: First class

Persian Rugs: The sacred and holy color

ASTROLOGY

Temple of Nebuchadnezzar:

Fifth level of building, devoted to the planet Venus

Early Zodiac: Venus, ruling Taurus and Libra

CULTURE COMPARISON

American Indian: Feminine

China: Dynasties: Ming (1368-1644)

Egypt: Fertility, vegetation, rain, strength

Japan: Youth, energy, future
Olive green: Dignity

DIRECTIONS

China: Face of Mo-li Ch'ing, guardian of the east

Chippewa: South

EDUCATION (doctorate hoods)

United States:

Green: Medicine
Green: Osteopathy
Nile green: Podiatry
Olive: Pharmacology
Sage green: Physical education
Sea green: Optometry

ELECTRICAL ENGINEERING

Chassis wiring: Control grids, diode

←241



POSITIVE ASSOCIATIONS

The sky. Light blue connotes day, the calm sea; thinking, religious feeling, devotion, innocence, truth, constancy, justice, charity, cold

NEGATIVE ASSOCIATIONS

Dark blue connotes night and the stormy sea; doubt and discouragement

ART

Chinese Art:

Black on blue: Low class
Blue on black: Evil spirit
Blue on green: Women's color
Blue on white: Devil's color
Blue on yellow: Old mourning
Red on blue: Old mourning
White on blue or black: Lower class mourning
Yellow on blue: Divine

Persian Rugs: The warrior, power and might

ASTROLOGY

Temple of Nebuchadnezzar:

Sixth level of building, devoted to the planet Mercury

Early Zodiac: Jupiter, ruling Sagittarius and Pisces

CULTURE COMPARISONS

American Indian: Feminine

Cherokee: Tribulation and defeat

China: Worn by emperor to worship the sky; blue button on cap worn by second ranking officials

Season: Spring

Egypt: Virtue, faith, truth

Gaul: Worn by slaves

Japan: In theater, color of villains, supernatural creatures, ghosts and fiends

Tibet:

Light blue: Celestial

United States: Baby boy

DIRECTION (cardinal points)

Apache, Cherokee, Omaha, Sioux: North

Creek, Navaho: South

Hopi, Isleta, Zuni: West

Tibet: South

←242



POSITIVE ASSOCIATIONS

Power, spirituality, royalty, love of truth, loyalty, empire, patience, humility, nostalgia, memories

NEGATIVE ASSOCIATIONS

Sublimation, martyrdom, mourning, regret, penitence, resignation, humility

CULTURE COMPARISONS

China: Worn by literary and educated figures; purple button on cap worn by third ranking officials

Egypt: Virtue and faith

Japan: Graceful, nobility

Rome: Royal hue of the Caesars

DIRECTION (cardinal points)

Ireland: East

EDUCATION (doctorate hoods)

France:

Purple: Science

Violet: Rector, administration

United States:

Purple: Law

Lilac: Dentistry

ELECTRICAL ENGINEERING

Chassis wiring: Power supply, minus

Circuits (Switzerland): Aerial, electroacoustic

ELEMENTS

Judaic (Josephus): Sea

FOLKLORE

Death:

Preparation for: Egyptian warrior carried amulets of purple stone

Medieval magicians' vestments: Purple on Sunday, works of light

GEMS

Amethyst: Cured and prevented drunkenness; faith, charity, peace and devotion, powers of endearment, cured gout, gave pleasant dreams when placed under pillow; birthstone for February

←243



GOLD



ASTROLOGY

Early Zodiac: Mercury, ruling Virgo and Gemini

GEMS

Cat's eye: Arabs used it to make wearer invisible in battle; overcame witchcraft and sudden death

Onyx: Conjugal felicity, happiness, and remembrance

Opal: Cured diseases of the eye; hope, immortality, happiness, good luck and remembrance; conquered the evil eye and was used in healing; today it is accused of bringing bad luck; birthstone for October

Tourmaline: Friendship, faith, charity

RELIGION

American Indian:

Hopi: Fire god

Egypt: Isis, virgin of the world

Greek: Iris, goddess of the rainbow

Judaism: Union of man and deity (Noah story)

Kabbalah: Kingdom

Twelve Tribes of Israel: Mannasseh

POSITIVE ASSOCIATIONS

The earth

NEGATIVE ASSOCIATIONS

Barrenness, poverty

CULTURAL COMPARISONS

China: Sung Dynasty (960-1127 A.D.)

Chinese visiting cards when in mourning

Japan: Earth, dignity

DIRECTION (cardinal points)

Ireland: West

EDUCATION (doctorate hoods)

United States:

Brown: Fine Arts, including Architecture

Copper: Economics

Drab: Business and Accounting

Russet: Forestry

ELECTRICAL ENGINEERING

Chassis wiring: Heaters or filaments, off ground

Circuits: Low voltage

GEMS

Agate: Health, wealth, longevity, power to warrior, favor to lover, intelligence, happiness, health and long life; drove away fevers, epilepsy, madness; stopped the flow of rheum in the eye; reduced menstruation, dispersed the water of dropsy; warded away evil eye

Amber: Protection against the evil eye, witchcraft, and misfortune; when mixed with honey, cured earache and blindness; in dust form helped pains in the stomach, kidneys, liver, and intestines; burnt amber helped women in labor; a ball of amber reduced fever; beads prevented rheumatism, toothache, headache, rickets, and jaundice; a bit in the nose made it stop bleeding; worn around the neck, goiters vanished; Arab physicians used powdered amber for miscarriage, boils, carbuncles, and ulcers

Sard: Immortality

POSITIVE ASSOCIATIONS

Mystic aspect of the sun, majesty, riches, honor, wisdom

NEGATIVE ASSOCIATIONS

Idolatry

ALCHEMY

Fourth Phase: End product

ART

Chinese Art:

Gold on black: Old man's death

Gold on red: Special happiness

Gold on white: Aristocratic

Gold on yellow: Imperial

CULTURAL COMPARISONS

China: Gold button on cap worn by sixth ranking officials

Japan: Gold thread symbolic of long life

C244 →



SILVER

POSITIVE ASSOCIATIONS

Purity, chastity, test of truth, the moon

ART

Persian rugs: When lavishly used, signifies the power, grandeur and riches of the owner

HERALDRY

Tinctures:

Argent: Faith and purity

English nobility: Reserved for the higher

C244 →

POSITIVE ASSOCIATIONS

Day, innocence, purity, perfection, rectitude, wisdom, truth

NEGATIVE ASSOCIATIONS

Spectral, ghostly, cold, blank, void

ALCHEMY

Second stage: Quicksilver, first transmutation

ART

Chinese Art:

Blue on white: Devil's color
Gold on white: Aristocratic
Red on white: Important notice
White on black: Historic
White on blue or black: Lower class mourning
White on red: Good luck
White on yellow: Buddhistic
Yellow on white: Holy

Persian rugs: Purity, light, and peace of the Shah

ASTROLOGY

Temple of Nebuchadnezzar:

Seventh level of building (uppermost), devoted to the Moon

Early Zodiac: Moon, ruling, Cancer

CULTURAL COMPARISONS

American Indian: Feminine, peace, happiness

Arapaho: Male

Cherokee: Peace and happiness

China: Worn by emperor to worship the moon; crystal button was worn on the cap of fourth ranking officials, white by fifth ranking
Seasons: Autumn

French and Russian revolutions: Color of emigrés and legitimists

Rome: Worn by lady as an emblem of virtue and purity

DIRECTION (cardinal points)

Apache, Cherokee: South

China: Face of Mo-li Hai, guardian of the west

←244→

POSITIVE ASSOCIATIONS

Maturity, discretion, humility, penitence, renunciation, retrospection

NEGATIVE ASSOCIATIONS

Neutralization, egoism, depression, inertia, indifference, barrenness, winter, grief, old age, penitence

CULTURAL COMPARISONS

Japan: Soldier

EDUCATION (doctorate hoods)

United States:

Grey: Veterinary Science
Silver grey: Oratory

ELECTRICAL ENGINEERING

Chassis wiring: AC power lines

HANDLING OF GOODS

Gases (Austria): Gases not symbolized by other colors

MEDICINE

Anesthetic gases (Sweden): Carbon dioxide

MUSIC

Instrument tone: Bassoon, Flageolet

KEYS

Alexander Scriabin:

Eb, Bb (steely with the glint of metal)

PSYCHOLOGY

Old, mature, life on even keel

RELIGION

Christianity: Emblem of Christ risen, ashes, humility, and mourning

Order: Franciscans

Judaism:

Kabbalah: Wisdom

SAFETY

Gas-mask canisters (gray stripe):

Particulates (dusts, fumes, mists, fogs, smokes) in combination with other gas

←245→

POSITIVE ASSOCIATIONS

Mighty, dignified, stark, sophistication; regality, without being pompous; fertilized land, grim determination, night, solemnity, humility

NEGATIVE ASSOCIATIONS

Morbidity, nothingness, despair, night, evil, sin, death, sickness, negation

ALCHEMY

First stage: Prime matter, guilt, origin, latent forces

ART

Chinese Art:

Black on blue: Low class
Black on red: Happiness (wedding invitations)
Black on yellow: Religious
Blue on black: Evil spirit
Gold on black: Old man's death
White on black: Historic
White on blue or black: Lower class mourning
Yellow on black: Old man's death
Persian rugs: Sorrow and destruction, sad and somber occasions

ASTROLOGY

Temple of Nebuchadnezzar:

First level of the building, devoted to the planet Saturn

Early Zodiac: Saturn, which ruled Aquarius and Capricorn

CULTURE COMPARISONS

American Indian: Masculine, underworld, mourning, night

Cherokee: Death

China (seasons): Winter

DIRECTION (cardinal points)

Apache: East

Cherokee, Creek: West

China: Face of Mo-li Shou, guardian of the north

Chippewa, Isleta, Navaho: North
Ireland: North

Omaha, Sioux: South

EDUCATION (doctorate hoods)

French Universities: Theology

←245→



RED

(continued)

DIRECTION (cardinal points)

Cherokee, Chippewa, Omaha, Sioux: East
China: Face of Mo-li Hung, the guardian of the south
Creek (red and yellow): North
Hopi, Isleta, Zuni: South
Tibet: West

EDUCATION (doctorate hoods)

United States:
 Scarlet: Theology
 Crimson: Journalism
France:
 Red: Law
 Crimson: Medicine
 Purplish-red: Science

ELECTRICAL ENGINEERING

Chassis wiring: Power supply B plus (main stem)
Circuits (Switzerland): Power

ELEMENTS

Buddhist, Chinese, Greek (represented spirit), Hindu, Judaic (Josephus): Fire

FOLKLORE

Death:
 Africa: Color of mourning
 China: Red jade used in burial ceremonies to pay homage to the south
 China, India, Scotland: Soldiers carried red amulets as preparation for death
 Denmark, Germany, Hungary, Norway, Portugal, Scotland: Red string protected animals from death
 Fiji: Islanders painted themselves red after killing a man
 Italy: Token of a widow's love and faithfulness
 Portugal: Widows not permitted to wear red
 Shinto: Used to symbolize giving life to the dead
 South Africa: After killing a lion, the hunter painted himself white for four days, then red
Marriage: Marriage colors (red and yellow):
 Balkans, Egypt, Orient, Russia
 China: Brides wore red and were

carried in a red marriage chair with a red parasol; a red card tied the caps of the bride and groom together; red fire-crackers were exploded

Dutch East Indies: Red (or yellow) rice was sprinkled over the bridegroom to keep his soul from flying away; if names of a boy and girl were written on white paper with the blood of a red hen, the girl would become infatuated when she touched it

Ireland: Knotted red handkerchief at marriage ceremony meant curse on the wedding

India: Red paint and blood used in the marriage ceremony

Japan: Red (and white) girdles were protection during pregnancy

Medicine:

China (ribbon): Long life
Egypt: Red and white cake eaten for constipation; vermillion ink, goat's fat, and honey used to salve a wound

England: Protection against smallpox

Red string: Teething

Breath of red ox: Convulsions

Ireland (red wool): Sore throat

Red flannel: Scarlet fever

Japan: Nightmares, smallpox

Macedonia (yarn): Childbirth

Malay: Buffalo covered with red pigment was chased out of town, carrying the town's diseases with him

Perisa: Long life

Russia (flannel): Scarlet fever

Scotland (red wool): Sprains

Medieval magicians' vestments: Red on Tuesday, day of operations of vengeance; scarlet on Thursday, day of great religious or political operations

Superstition:

China: Red and yellow paper used against demons

Egypt: Red amulets prevented disease and protection for wearer from thunder and lightning

India, Ireland, Mexico, Turkey: "Red hand" painted on dwellings shielded inhabitants from harm

Japan: Red cats are bad luck

Syria: Painted on dwellings for good luck

GEMS

Agate: Protected against fire and scorpions

Bloodstone: Happiness and remembrance

Carbuncle: Charity, cured heart ailments

Carnelian: Good luck, cure of voice and speech impediments, restrained hemorrhage and removed blotches

Coral: Cured heart ailments

Garnet: Power, grace, victoriousness, high esteem, good luck; cured heart ailments, skin eruptions; birthstone of January

Ruby: Divine power, dignity, charity, high esteem, remembrance; cured heart ailments; dipped in water for stomach remedy; ground into powder to stop bleeding; birthstone for July

Rings for professions (Brazil): Lawyer

GEOGRAPHY

Roads, telegraph lines

HANDLING OF GOODS

Gases (Austria): Flammable

Inter-Governmental Maritime Consultative Organization shipping labels: Flammable gas or liquid

One-half red, one-half white: Spontaneously combustible

Red and white striped: Flammable solid

League of Red Cross Societies relief shipments: Foodstuffs

HERALDRY

Crusades: French wore red crosses on their shoulders

Tinctures:

Gules: Courage and zeal

HOLIDAYS

Christmas, St. Valentine's Day, Fourth of July, Mother's Day: Red carnation if mother living

LANGUAGE

Colloquialisms:

Reds: Communists

Red herring: Diverts attention

Red letter day: Memorable or happy day

Paint the town red: Wild time

Sees red: Gets angry

Scarlet letter: Adultery

Scarlet woman: Prostitute

In the red: In debt

Red tape: Excessive forms, records, procedures before action can be taken

Russian: Red means beauty

MEDICINE

Doctor call: Red flag displayed outside homes in early Massachusetts to summon doctor on his rounds

Hygiene markings (Sweden):
Unsterile and dirty
England: Physicians wore red cloak

METEOROLOGY

Coast Guard flags: Storm or hurricane (red flag with black center)
Weatherfront markings on maps:
Warm fronts
Red and blue: Quasistationary fronts
Red and green: Intertropical discontinuity

MUSIC

Instruments:
Trumpet (Goethe), strings (Wagner)
Keys:
Alexander Scriabin
C: Red
F: Dark red
Notes:
American Taylor System:
C: Red
C#: Red-orange
Louis Bertrand Castel:
G: Red
G#: Crimson
George Field:
E: Red
Alexander Hector:
G#: Red-violet
A: Red
A#: Red-orange
A. B. Klein:
C: Dark red
C#: Red
D: Red-orange
Isaac Newton:
C: Red
A. Wallace Rimington:
C: Deep red
C#: Crimson
D: Orange-crimson

PRIZES

Second

PSYCHOLOGY

Warm, extroverted, fiery, aggressive, vigorous, impulsive, sympathetic, abrupt, crude, rude, optimistic
Color Preferences:
Child: Fourth
Adult: Second

RECREATION

Sports:
Auto racing: Come to complete stop
British athletic teams: Welsh

RELIGION

Aztec: Used in human sacrifices
Buddhism: Worn by Buddha when

pondering the vicissitudes of man
Christianity: Blood of Christ, charity and martyrdom for faith, hell, love, youth, fervor, sin and atonement
Liturgical: From and with vespers of the Saturday before Whitsunday to the vespers of the Saturday before the festival of the Holy Trinity to signify fiery tongues; on all Apostles' and Evangelists' Days (except St. John) to show their passage to heaven in blood; on days of martyrs, on all church anniversaries; the festival of the Harvest, on Thanksgiving Day
Threefold aspect of man: The body
Trinity: God the Holy Ghost
Confucianism: Red disliked by Confucius
Egyptian: Shu, god who separated the earth from the sky
Greek: Token of human love and sacrifice; worn when reciting the Iliad to signify the bloody encounters; Ceres' flower was the red poppy
Hindu (also gold): Brahma
Caste: Kshatriyas, second, soldiers
Islam: Mohammed swore oaths by the "redness of the sky at sunset"
Judaism:
Hebrew color of God: Red fire for love, sacrifice, and sin
Kabbalah: Strength
Twelve tribes of Israel: Judah, Reuben
Shinto: Chief color of the religion; symbolizes life to dead ancestors

SAFETY

Stop, stop harmful activity, fire fighting equipment, danger, flammable
Gas-mask canisters:
Red with gray stripe: All atmospheric contaminants
Piping: Fire protection water or fluids
Nautical:
Green with red stripe: Fire prevention water
Surf: Heavy, dangerous

TRAFFIC

Highway Color Code: Stop, prohibition
Rail: Stop

TRAVEL

Signs in terminals: Danger

PINK

POSITIVE ASSOCIATIONS

Color of the flesh, sensuality, emotions

CULTURE COMPARISONS

Japan: Happy
United States: Baby girl

EDUCATION (doctorate hoods)

United States:
Light rose: Statistics
Pink: Music
Salmon pink: Public Health
Rose: Textiles

GEMS

Pink tourmaline:
Rings worn by professions (Brazil):
Businessman

HOLIDAYS

Easter

MUSIC

Instrument tone:
Oboe (Goethe)

PSYCHOLOGY

Color Preferences:
Child: Third
Adult: Fifth



ORANGE

(continued)

Keys:
Alexander Scriabin:
G: Orange
Notes:
American Taylor System:
C#: Red-orange
D: Orange
D#: Orange yellow
Louis Bertrand Castel:
F#: Orange
F: Yellow-orange
George Field:
F: Orange
Alexander Hector:
A#: Red-orange
B: Orange
A. B. Klein
D: Red-orange
D#: Orange
Isaac Newton
D: Orange

A. Wallace Rimington
D: Orange crimson
D=: Orange

PSYCHOLOGY

Social, "Hail fellow well met," fickle, unsteady, vacillating, defer to others opinions, agreeable, good natured, gregarious, appeals to Northern Irish

Color preferences:

Child: Fifth
Adult: Seventh

RECREATION

Sports:

Auto racing (flag with blue center):
One car attempting to pass another

RELIGION

Judaism:

Kabbalah: Mercy

SAFETY

Dangerous parts of machines or energized equipment which may cut, crush, or shock

TRAFFIC

Highway Color Code: Construction or maintenance warning



YELLOW

(continued)

Creek, Hopi, Zuni: North
Tibet: North

EDUCATION (doctorate hoods)

United States:

Citron: Social Work
Cream: Social Science
Golden yellow: Science
Lemon: Library Science

ELECTRICAL ENGINEERING

Chassis wiring: Cathodes and transistor emitters

Circuits (Switzerland): Heating

Yellow-green: Separately installed electrical conductors

ELEMENTS

Aristotle: Fire
Buddhist: Earth

Chinese: Earth

Greek: Air (represented the person)

FOLKLORE

Death:

China: Yellow tube used in burial ceremonies to pay homage to the earth

Guatemala: Some widows paint their bodies yellow

Marriage: Red and yellow are marriage colors in Egypt, the Orient, Russia, and the Balkans

Dutch East Indies: Red or yellow sprinkled over the bridegroom to keep his soul from flying away

India: Bride wore tattered yellow garments six days before the wedding to drive away evil spirits; also wore yellow at the ceremony

Medicine:

Color for quarantine

Jaundice cures:

England: Yellow spiders rolled in butter

Germany: Turnips, gold coins, saffron

Malay: Disease driven away in a yellow ship

Russia: Gold beads

Superstition:

China: Red and yellow paper used against demons

Theaters in west: Bad luck

GEMS

Beryl: Cured jaundice and bad liver

Saffron: Sleeping potion and tranquilizer

Yellow sapphire: Charity

HANDLING OF GOODS

Inter-Governmental Maritime Consultative Organization shipping labels:

Oxidizing agent, organic peroxide

League of Red Cross Societies relief shipments: Medical supplies and equipment

HERALDRY

Tinctures:

Or: Honor and loyalty

HOLIDAYS

Easter (with purple)

LANGUAGE

Colloquialisms:

Contracts: Anti-socialist, trade union

Yellow dog: Scoundrel

Yellow journalism: Sensationalism

Yellow stripe: Coward

Mexico: Word for god who supported the sky was Kan, yellow

MEDICINE

Hygiene markings (Sweden):

Unsterile: Infectious and unsterilized

MUSIC

Instruments:

Clarinet (Goethe)

Oboe (Philip Hale)

Keys:

Alexander Scriabin:

D: Yellow

Notes:

American Taylor System:

D#: Orange-yellow

E: Yellow

F: Yellow-green

Louis Bertrand Castel:

F: Yellow-orange

E: Yellow

D#: Yellow-green

George Field:

G: Yellow

A: Yellow-green

Alexander Hector:

C: Yellow

C#: Yellow-green

A. B. Klein:

E: Yellow

F: Yellow-green

Isaac Newton:

E: Yellow

A. Wallace Rimington:

E: Yellow

F: Yellow-green

PRIZES

Third

PSYCHOLOGY

Imagination, novelty, self-fulfillment, intellectual, idealistic; cultists, reformers; depth of introspection and contemplation; controlled temper; warmth and joy

Color preferences:

Child: First

Adult: Eighth

RECREATION

Sports:

Auto racing (flag): Caution

RELIGION

Buddhism: Buddha's color, color of robes worn in ordination of Buddhist priest

Christianity: Power and the glory, nimbus of Saints, gates of heaven, hue of confessors (saffron), hue of Judas

Dingy yellow: Infernal light, degradation, jealousy, treason and deceit

Threefold aspect of man: Mind

Trinity: God the Son

Confucianism: Sacred to Confucius

Egyptian: Ra (sun)

Hindu: Vishnu, the Preserver, universal understanding

Caste: Vaisyas, third, mercantile

Judaism:

Kabbalah: Beauty

Twelve Tribes of Israel: Simeon

SAFETY

Warning of danger, caution signs, insides of machinery guards; designates striking against, stumbling, falling, tripping, and "caught in between" hazards; often used with black stripes or checks

Yellow lettering on red: Flammable liquid

Yellow and purple: Used for radiation hazards

Gas-mask canisters:

Yellow: Acid gases and organic vapors

Yellow with blue stripe: Hydrocyanic acid gas and chloropicrin vapor

White with yellow stripe: Chlorine

Piping: Dangerous materials (i.e., gases, acids)

Nautical:

Ochre: Gases in gaseous or liquified condition (except air)

With black stripe: Danger

Surf: Caution, rip tides

TRAFFIC

Highway Color Code: General warning

Rail: Proceed with caution and at reduced speed

TRAVEL

Signs in terminals: Information



GREEN

(continued)

plates, and first transistor bases

Circuits (Switzerland):

Green: Telephone and telediffusion

Yellow-green: Separately installed protective conductor

ELEMENTS

Buddhist: Wood

Chinese: Wood

Greek: Water (represented the world)

FOLKLORE

Medicine: Indigestion in Ireland relieved by measuring the waist with green thread in the name of the Trinity, then eating three dandelion leaves on a piece of bread and butter for three consecutive mornings

Medieval magicians' vestments: Green on Wednesday, day favorable to science

GEMS

Alexandrite: Everlasting life and friendship, faith and powers of endearment

Beryl: Happiness and eternal youth, cured eye ailments, birthstone for March (aquamarine)

Chrysolite: Banishes the hidden terrors of night

Chrysoprase: If a thief to be hanged were to put one in his mouth, he would escape

Emerald: Immortality, friendship, happiness, high esteem, powers of endearment, good luck, memory, faith, brought wisdom, struck terror into the viper and cobra to make their eyes burst from their heads, cured eye ailments, heart ailments, birthstone for May
Rings worn by professions (Brazil): Physicians

Feldspar (green): Used when reciting Chapter 27 of the *Egyptian Book of the Dead*

Heliotrope: Power

Jade: Good fortune, good luck, brought rain and frightened wild beasts and evil spirits, used in burial ceremonies in China, assisted in child birth, cured dropsy, quenched thirst, relieved heart palpitation

Peridot: Birthstone for August

Serpentine: Protects against venomous bites

Tourmaline (green):

Rings worn by professions (Brazil): Professors

HANDLING OF GOODS

Gases (Austria): Nitrogen

Inter-Governmental Maritime Consultative Organization shipping labels: Compressed gas

League of Red Cross Societies relief shipments: Blankets and bedding

HERALDRY

Tinctures:

Vert: Youth and hope

Crusades: Flemish wore green crosses on their shoulders

HOLIDAYS

St. Patrick's Day, Christmas

LANGUAGE

Colloquialisms:

Green for jealousy and envy

Greenbacks: Paper currency

Green goose: Harlot

Green, greenhorn: Inexperienced

MEDICINE

Hygiene markings (Sweden): Sterile

METEOROLOGY

Weatherfront markings on maps: Intertropical discontinuity

MUSIC

Instruments:

French horn, woodwinds (Wagner)

Keys:

Alexander Scriabin

A: Green

Notes:

American Taylor System:

F: Yellow-green

F#: Green

G: Blue-green

Louis Bertrand Castel:

D#: Yellow-green

D: Green

C#: Blue-green

George Field:

A: Yellow-green

B: Green

Alexander Hector:

C#: Yellow-green

D: Green

D#: Blue-green

A. B. Klein:

F: Yellow-green

F#: Green

G: Blue-green

Isaac Newton:

F: Green

A. Wallace Rimington:

F: Yellow-green

F#: Green

G: Bluish-green

G#: Blue-green

PRIZES

Special Awards

PSYCHOLOGY

Civility and the good citizen, sensitive to social customs and etiquette, bourgeois, abundance and good health

Color preferences:

Child: Seventh

Adult: Third

RECREATION

Sports:

Auto racing (flag): Start

RELIGION

Christianity:

Holy Grail: Color of God, faith, immortality, contemplation, everlasting as nature, hue of baptism, hope, peace, spring, triumph of life over death, charity, regeneration of the soul through good works

Liturgical: Epiphany and Trinity seasons

Used on days (except Saint's Day) from Trinity Sunday until Advent and from Octave of the Epiphany to Septuagesima, exclusively

Druidism:

Division of Ovates (lowest): Color of learning, members expected to be versed in medicine and astrology

Egyptian: Osiris, god of vegetation and death, material aspect of solar divinity

Hindu: Color of the horse with seven heads that drew Om, the sun, across the sky

Islam: The most sacred color, the banner of Mohammed

Judaism:

Kabbalah: Victory

Twelve tribes of Israel: Ephraim, Benjamin, Dan

SAFETY

Escape routes and refuges, clear or go signals for persons and vehicles, first aid and rescue stations and equipment and their location, gas masks and stretchers, stands for safety itself; water

Gas-mask canisters:

Green: Ammonia gas

Green with white stripe: Acid gases and ammonia

White with green stripe: Hydrocyanic acid gas

Piping:

Nautical: Water in liquid state

Surf: Average

TRAFFIC

Highway Color Code: Indicated movement permitted, direction guidance

Rail:

Green: Track is clear

Green and white: Stop train only at flag stations on its schedule

TRAVEL

Signs in terminals: Identification



BLUE

(continued)

EDUCATION (doctorate hoods)

United States:

Dark blue: Philosophy

Light blue: Education

Peacock blue: Public Administration

ELECTRICAL ENGINEERING

Chassis wiring: Plates (anodes) and transistor collectors

Circuits (Switzerland): Lighting

ELEMENTS

Greek: Earth (represented man)

Jewish (Josephus): Air

FOLKLORE

Death:

Blue amulet as preparation: England

Fertility:

Blue beads: East Central Africa

Blue and white girdles: Protection during pregnancy in France

Marriage: Blue spot behind groom's ear thwarted powers of evil in Morocco

Medicine: Blue thread cured croup in Ireland

Medieval magicians' vestments: Sky blue on Friday, day of amorous operations

Mourning: Borneo, Mexico, Chaldee, Germany

Superstition:

Blue string around necks of animals protected them from death: Afghanistan, Syria, Macedonia

Blue hand painted on doors and walls for protection: Jerusalem

GEMS

Hyacinth: Second sight

Lapis Lazuli: Used when reciting Chapter 26 of the *Egyptian Book of the Dead*

Sapphire: Guardian of chastity, true love, friendship, memory, and life everlasting; royal stone; powers of endearment; brought mental and physical well being; prevented disease and plague; cured eye ailments and heart ailments; birthstone for September

Rings worn by professions (Brazil): Engineers

Turquoise: Powers of endearment, warded off evil eye, marital harmony, protects against injury from falling, poisons, reptile bites, eye disease; dipped in water to make cure for retention of urine, warned of death by changing color; birthstone for December

GEOGRAPHY-CARTOGRAPHY

Hydrographic features

HANDLING OF GOODS

Gases (Austria): Oxygen

Inter-Governmental Maritime Consultative Organization shipping labels: Dangerous (combustion may occur) when wet

League of Red Cross Societies relief shipments: Clothing

HERALDRY

Tinctures:

Azure: Piety and sincerity

LANGUAGE

Colloquialisms:

Feeling blue, have the blue devils: Depression

Blues: Music of American Negro origin usually using a major scale with the third and seventh notes flatted

Blue laws: Puritanical laws

Blue blood: Aristocracy

MEDICINE

Anesthetics (Sweden): Nitrous oxide (laughing gas)

Hygiene markings (Sweden): Clean, but not sterilized

METEOROLOGY

Weatherfront markings on maps:

Blue: Cold front

Red and blue: Quasistationary front

Coast Guard: Rain or snow

MUSIC

Instruments:

Cello: Indigo (Goethe)

Flute (Philip Hale)

Violin: Ultramarine

Keys:

Alexander Scriabin:

E: Blue

F#: Bright blue

B: "Pearly blue", "the shimmer of moonshine"

Notes:

American Taylor System:

G: Blue-green

G#: Blue

A: Blue-violet
 Louis Bertrand Castel:
 C#: Blue-green
 C: Blue
 B: Indigo
 George Field:
 C: Blue
 Alexander Hector:
 D#: Blue-green
 E: Blue
 F: Indigo
 F#: Blue-violet
 A. B. Klein:
 G: Blue-green
 G#: Blue
 A: Blue-violet
 Isaac Newton:
 G: Blue
 A: Indigo
 A. Wallace Rimington:
 G: Bluish-green
 G#: Blue-green
 A: Indigo
 A#: Deep blue

PRIZES

First

PSYCHOLOGY

Deliberation and introspection, conservatism, acceptance of obligations, higher education, culture, income, spirituality and thought, relaxing

Color preferences:

Child: Sixth
 Adult: First

RECREATION

Sports:

Auto racing:
 Blue flag: Last lap
 Orange flag with blue center: One car attempting to pass another
 British athletic teams: Scots

RELIGION

Christianity:

Virgin Mary, love of divine and good works, heavenly love, hope, sincerity, piety, peace, prudence, serene conscience

Liturgical: Advent and pre-Lenten

Gesima Sundays (English only)

Threefold aspect of man: Spirit

Trinity: God the Father

Druidism: Division of Bards (Middle); color of harmony and truth; members were poets and musicians

Egyptian: Amen, god of life and reproduction

Greek: Conception of good and sign of truth

Hindu: Associated with the origin of the gods in the sea

Judaism: Sacred to God, blue fire of God means glory

Kabbalah: Mercy
 Twelve tribes of Israel: Issachar, Naphthal

SAFETY

Designates caution, particularly against the starting of, use of, or the movement of equipment under repair or being worked upon; an auxiliary color for purposes of organization, instruction, or information

Gas-mask canisters:

Blue: Carbon monoxide
 Yellow with blue stripe: Hydrocyanic acid gas and chloropicrin vapor

Piping: Protective materials (i.e. antidote gases)

Nautical:

Green with blue stripe: Fresh water, potable or nonpotable
 Light blue: Air

TRAFFIC

Highway Color Code: Motorist services guidance

Rail: Workmen are about or under an engine, car, or train

TRAVEL

Signs in terminals: Information and instruction



PURPLE

(continued)

HERALDRY

Tinctures:

Murrey: Sacrifice
 Purpure: Royalty and rank

HOLIDAYS

Easter (with yellow)

LANGUAGE

Colloquialisms:

Purple with rage

MEDICINE

Anesthetics (Sweden): Ethelyne

METEOROLOGY

Weatherfront markings on maps: Occluded fronts

MUSIC

Instruments:

Oboe (Christopher Ward)
 Trombone (Philip Hale)
 Goethe:
 Purple: French horn
 Violet: Flageolet

Keys

Alexander Scriabin:
 Db: Purple
 Ab: Violet

Notes:

American Taylor System:

A: Blue-violet

A#: Violet

B: Violet-red

Louis Bertrand Castel:

A: Violet

A#: Pale-violet

George Field:

D: Violet-purple

Alexander Hector:

F#: Blue-violet

G: Violet

G#: Red-violet

A. B. Klein:

A#: Violet

B: Dark-violet

Isaac Newton

B: Violet-purple

A. Wallace Rimington:

B: Violet-purple

PRIZES

Winner over all classes

PSYCHOLOGY

Vanity, good mind and wit

Color preferences:

Child: Eighth
 Adult: Sixth

RELIGION

Christianity: Purple robes worn by Christ before crucifixion; suffering and endurance, the hue of the penitent, the self-sacrificing god, repentance, royalty, imperial power, passion

Liturgical: From vespers on the Saturday before Advent Sunday to vespers on the eve of the Nativity; from the vespers of the day before Ash Wednesday throughout Lent (excepting Good Friday) to vespers of the Eve of Easter; ember and Rogation days, funerals, Holy Innocents (unless on Sunday, then red)

Confucianism: Purple disliked intensely by Confucius

Greek: Worn when reciting the Odyssey to signify the sea wanderings of Odys.

Judaism:

Hebrew color of God: Purple fire for splendor and dignity; divine condescension

Kabbalah: Foundation-basis of all there is

Twelve Tribes of Israel: Zebulon, Asher

SAFETY

Used for radiation hazards (with yellow); valuable materials, caution against waste

Gas-mask canisters: Radioactive materials, excepting tritium and noble gases

Piping:

Nautical: Acids and alkalis

TRAFFIC

Highway Color Code: Children's crossing

Rail: "Dwarf signal" — stop



BROWN

(continued)

Topaz: Friendship and fidelity, powers of endearment, faith; birthstone for November

Rings worn by professions (Brazil): Dentist

HERALDRY

Used by lesser nobility

HOLIDAYS

Thanksgiving

LANGUAGE

Colloquialisms:

Done brown: victim of a genteel swindle

MEDICINE

Anesthetic gases (Sweden): Helium

MUSIC

Instrument tone:

Trombone, French horn

Bass (Christopher Ward)

PSYCHOLOGY

Conscientious performance of duty,

parsimony, and shrewdness with money; obstinacy of habits and convictions; reliability

RELIGION

Christianity: Penitence, renunciation, monasticism, spiritual death, degradation

Magi: Brown King (incense)

Orders: Reformed branch of Franciscans

White over brown: The Carmelites

SAFETY

Gas-mask canisters: Acid gases, organic vapors, ammonia gases

Piping:

Nautical: Mineral, vegetable, and animal oil; combustible liquids

TRAFFIC

Highway Color Code: Public recreation and scenic guidance



GOLD

(continued)

FOLKLORE

Marriage (Judaic): Ceremony under golden robe

Superstition:

Bavaria: Sower wore gold ring to endow his grain with a rich color

HERALDRY

British royalty: Crown of England fashioned of gold and purple; reserved for higher nobility

RELIGION

Greek: Robe worn by Athena

Hindu: Brahma (also red), the Creator



WHITE

(continued)

Chippewa, Creek, Hopi, Isleta, Navaho, Zuni: East

Ireland: South

Tibet: East

EDUCATION (doctorate hoods)

United States: Arts and letters

ELECTRICAL ENGINEERING

Chassis wiring: Bias supply, B or C minus, AVC and AGC

ELEMENTS

Buddhist: Metal

Chinese: Metal

Greek: Sphere of the deity

Hindu (white color of fire): Water

Judaic (Josephus): Flax

FOLKLORE

Death:

Borneo: White (or dark blue) used in mourning

China: Accepted color of mourning, white jade used in burial ceremonies to pay respects to the west

England: Widows wore white band with black

Japan: Accepted color of mourning; when worn by Japanese bride it means she is dead to her family and belongs solely to her husband

Marriage:

In Japan, the daughter of a man who fed 1,000 white hares in his house would marry a prince; white (and red) girdles were protection during pregnancy

France: Blue and white girdles were protection during pregnancy

Medicine:

Brittany: The milk of a white hare cured fever

Egypt: Red on white cake cured constipation

Greece and Rome: White garments worn to cause pleasant dreams

Plutarch: White reed found on banks of a river while one journeyed to a dawn sacrifice; is strewn in a wife's bedroom, drove an adulterer mad and forced him to confess his sin.

Medieval magicians' vestments: White on Monday (no particular function)

Superstition:

Egypt: White amulets protected bearer from evil eye and other perils

England: Yorkshire fishermen fear white

India: Sacrificing white beasts brought the sun

Spain: White insect was good luck, but white moth was a harbinger of death in Castile and Spanish Galicia

GEMS

Crystal: Divination; in powder form it cured swellings of glands, diseased eyes, heart ailments, fever, and intestinal pains; mixed with honey it increased the milk of a mother

Australia: Brought rain

Mexico: Stones were the dwellings for souls of the living and dead

Scotland: Stone of victory

Diamond: High esteem, powers of endearment, friendship, good luck; fortified mind and body and cured almost everything; dipped in water and wine, it formed an elixir that cured gout, jaundice, and apoplexy; birthstone for April

Pliny: Rendered poisons harmless; drove away madness, the evil eye, demons, and wild beasts

Jasper: Wisdom and courage

Moonstone: Produced abundant crops and fruit, lucky stone in the Orient

Quartz (Iris Stone): Epilepsy

Zircon: Everlasting life

HANDLING OF GOODS

Gases (Austria): Acetylene

Inter-Governmental Maritime Consultative Organization shipping labels:

Black and white: Corrosive, poison, poison gas, radioactive

*One-half red and one-half white: Spontaneously combustible

Red and white striped: Flammable solid

HERALDRY

Crusades: English soldiers wore white crosses on their shoulders

English royalty:

Lancastrians: White and blue

Stuarts: White

Tudors: White and green

LANGUAGE

Colloquialisms:

To be white: Noble human (as contrasted by Caucasians with non-Aryans such as Indian and Negro)

White feather, white flag: Surrender, symbol of peace, truce

MEDICINE

Anesthetics (Sweden): Oxygen

Black and white: Air

METEOROLOGY

Coast Guard weather flags:

Fair weather

White flag with square black center:

Cold wave

PRIZES

Fourth

PSYCHOLOGY

Simplicity, willingness to live, honest, noninvolved

Color preferences:

Child: Second

Adult: Fourth

RECREATION

Sports:

Auto racing (flag): Stop for consultation

Black and white checkered: The finish

British athletic teams: English

RELIGION

Christianity: Chastity, innocence, purity, baptism, light, faith, divinity, virginity, angels, confessions, virgins, the spotless Lamb of God, holiness of life

Liturgical: From and with vespers of the Eve of Nativity, through the Epiphany season (except St. Stephen's Day), from Easter Day to the vespers of the Saturday before Whitsunday; on the festival of Transfiguration, the presentation; festival of the Holy Trinity and its octave, days of Annunciation and Visitation, day of St. Michael and All Angels

Magi:

White king: Gold

Orders: Reformed branch of the Benedictines, Cistercians, the Order of the Holy Cross

Black over white: The Dominicans

White over brown: The Carmelites

Confucianism: Sacred to Confucius

Druidism: Division of Ministers

Egypt: Horus (masculinity and femininity)

Greek: Emblem of divinity; white robes worn by temple priests

Hindu:

Caste: Brahman, first class, priests

Islam: Chief color worn by Mohammed

Judaism: White fire of God symbolized purity, joy, victory

Kabbalah: Concentration of divine light

Twelve Tribes of Israel: Gad

SAFETY

Black and white: Used for traffic and housekeeping markers (stairs, trash cans)

Gas-mask canisters:

White: Acid gases

White with green stripe: Hydrocyanic acid gas

White with yellow stripe: Chlorine

TRAFFIC

Highway Color Code: Regulation

Rail (with green): Used to stop train only at flag station on its schedule



GRAY

(continued)

Piping:

Nautical: Steam



BLACK

(continued)

ELECTRICAL ENGINEERING

Chassis wiring: Grounds, grounded elements, and returns

ELEMENTS

Buddhist: Water

Chinese: Water

Hindu (black color of burning fire): Earth

FOLKLORE

Death:

China: Black jade used in burial ceremonies to pay respects to the north

West: Universal color of mourning

Fertility:

Africa (East-Central): Wife wore black hen on her back

Algeria: Black hens sacrificed

Medicine: Black snails cured warts; black fowl, if buried where caught, cured epilepsy

Egypt: Blood of black cat used for various ailments

England and South Africa: Blood of a black cat prescribed for pneumonia

France: The limbs of black animals applied warm to the limbs of the body relieved rheumatism

Ireland, England, and Vermont: Black wool cured earache

Russia: Cured jaundice

Medieval magicians' vestments: Black on Saturday, day of funeral operations

Superstition:

England: Northumberland fishermen fear black

India: Crops were saved from rain and hail damage by a twin standing in the direction of the wind with his right buttock painted black and his left some other color; sacrifice of black animals brought rain

Ireland: Pelt of a black dog buried to quell storms

Japan: Black cat had divine powers and could foretell the weather

Spain: Black insect was bad omen, black cat was good luck

United States: Black cat is generally bad luck, but success for a theatrical production

GEMS

Jet: Nullified spells, drove away snakes, quelled thunderstorms, gave safety to the traveler and kept him free of the evil eye, healed epilepsy, toothache, headache, glandular swellings

GEOGRAPHY

Contours (sea and land), heights and soundings, railways, submarine cables

HANDLING OF GOODS

Inter-Governmental Maritime Consultative Organization shipping labels (with white): Corrosive, poison, radioactivity

League of Red Cross Societies relief shipments: Toilet and comfort articles

HERALDRY

Tinctures:

Sable: Grief and penitence

HOLIDAYS

Halloween

LANGUAGE

Colloquialisms: Synonym for evil and despair

Blackball: Ostracism, negative vote

Blackmail: Extortion

Black sheep: Disgrace of the family

MEDICINE

Anesthetic gases (Sweden): Nitrogen

Black and white: Air

METEOROLOGY

Weatherfront markings on maps: In-

stability lines, shear lines, axis of trough, axis of ridges

Coast Guard weather:

White flag with square black center: Cold wave

Red flag with black center: Hurricane

Black pennant above weather flag: Temperatures will get warmer

Black pennant below weather flag: Temperatures will get cold

MUSIC

Instrument tone:

Bassoon (grayish-black) (Philip Hale)

Brass (Wagner)

Keys:

Beethoven:

B minor

PSYCHOLOGY

Morbid, despairing, gloom, sophistication, regal without being pompous

RECREATION

Sports:

Auto racing (black and white checkered): Finish

RELIGION

Christianity: Death and regeneration, black rose a symbol of silence, Protestant dress of students and ministers, mourning.

Liturgical: Good Friday and Day of Humiliation

Magi: Black king brought myrrh

Orders: Benedictines, Augustinians, Jesuits, Cowley Fathers

Black over white: Dominicans

Confucianism: Sacred to Confucius

Egypt: Set, god of evil and darkness

Hindu: Shiva, the destroyer and reproducer

Caste: Sudras, lowest, servile class

Islam: Color of "Blackstone," turned black by sins of man; Moslems pray for its return to whiteness

Judaism:

Kabbalah: Understanding (absorbs all light)

SAFETY

Physical hazards, used with yellow (*see under* Yellow)

Black and white: Traffic and house-keeping markings (stairways and trash cans)

Gas-mask canisters: Organic vapors

Piping:

Nautical: Other liquids

TRAFFIC

Highway Color Code: Regulation

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BIBLIOGRAPHY
INDEX

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BIBLIOGRAPHY

The Bibliography is divided into three separate parts: General, Disciplines, and Color.

GENERAL — Composed of references not limited to any one Discipline.

A discussion of the publications of standards organizations is also included here.

DISCIPLINES — Includes all bibliographic sources from which symbols have been selected, as well as additional material to provide more extensive research in any given Discipline.

It should be noted that many enthusiastic individuals were kind enough to send us printed material and photographs which were, unfortunately, not sufficiently identified to permit proper bibliographic entry in spite of their clear authenticity.

In academic areas where vast numbers of references exist, we have followed the advice of our consultants in noting only a few publications selected to give the reader the extended knowledge he may seek.

COLOR — This subject is one of great scope and interest and a vast amount of material on various phases of color studies exists. Our Bibliography is, of necessity, limited to the sources actually used in developing our listings.

General

Since the role played by various national and international standards organizations is so significant in the universal acceptance of symbols, a brief description of these organizations may be helpful to the reader.

ISO (International Organization for Standardization) promotes and coordinates worldwide standards, in all areas except those covered by IEC, through its national member bodies. The standardization work of ISO is handled in its Technical Committees (chaired by individual member bodies). A full list of ISO Recommendations and Draft ISO Recommendations, under the title "ISO CATALOG," is published annually by:

ISO Central Secretariat
1, rue de Varembe
1211 Geneva 20, Switzerland

IEC (International Electrotechnical Commission) promotes and coordinates international electrotechnical standards in the fields of power, electronics, and telecommunications. Countries participate in the IEC through National Committees. Standardization is handled by Technical Committees with participation from the National Committees. A full list of IEC Recommendations, under the title "Publications of the International Electrotechnical Commission," is published annually by:

Central Office of the IEC
1, rue de Varembe
1211 Geneva 20, Switzerland

ANSI (American National Standards Institute) is the national member body representing the United States in ISO. ANSI acts within the United States as the agent and information center for all other ISO national member bodies, and publishes an annual catalog, with bi-monthly supplements, of its own standards, as well as those of ISO and IEC. This catalog is available from:

American National Standards Institute
1430 Broadway
New York, New York 10018

Other countries have equivalent organizations which, as member bodies of ISO, offer similar services.

DIN (Deutscher Normenausschuss), the national member body representing Germany in ISO, has the ISO Technical Committee Secretariat for developing recommendations for international standardization of *signs* and *symbols*. The work of this Technical Committee, ISO/TC

General *(continued)*

145 "Graphic Symbols," is currently being coordinated as Proposals, Drafts and Standards. Information may be obtained from:

Deutscher Normenausschuss
4-7 Burggrafenstrasse
1 Berlin 30, Germany

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Our prime concern in creating the Index for this Sourcebook was to make it as easy to use as possible. With this in view, we have developed a system of cross referencing that varies somewhat from the norm. Plus we have made a selection of design concepts and areas of design and put them into one convenient listing we call Design Categories.

CROSS REFERENCING

1. When a cross reference leads the reader to an entry with only one page reference, or to an entry uncomplicated by related subentries, we have included the page number in the cross reference to save the reader the trouble of having to look up yet another entry in the Index.
For example: Cafe (*see* Coffee shop, 35)
2. We have also included page numbers for references which do not appear in the Index but do appear on a particular page. The reader can thus go directly from the entry in the Index to the page itself.
For example: *under* Boating: (*See also* Sailing, Canoeing, Rowing, 135)
3. We have used yet another unusual type of cross referencing system with entries directly related to Disciplines within the Sourcebook.
For example: Constellations, *see* Astronomy, 54. Here, the reader is directed to the Discipline page without having to look for the Discipline itself in the Index.

It is our belief that these cross referencing devices will save the reader time by making it unnecessary for him to go back and

forth through the Index to find a particular symbol reference.

DESIGN CATEGORIES

Certain ideas, functions, and physical states are common to many disciplines and have a wide variety of applications. We have grouped these into what we call Design Categories, since they are likely to be referred to most frequently in symbol identification and selection. The complete listing of these Design Categories is shown below, with words in parentheses that further describe each category. Each Design Category appears as a separate entry in normal alphabetical position within the Index.

Building signage (elevators, stairs; retail shops . . .)
Forward and reverse (toward, away; return . . .)
In and out (extend, retract; engage, disengage; arrive, depart . . .)
Increase and decrease (relative change; progression; large, small; multiply, divide . . .)
Male and female (man, woman . . .)
Measurement (linear dimension; amount; near, far; length, height . . .)
On and off (start, stop . . .)
Open and close (lock, unlock; tighten, loosen . . .)
Pressure (of oil, air, etc.; force . . .)
Speed (fast, slow; rate . . .)
Temperature (thermometer; heat; frozen)
Time (frequency; interval; clock . . .)
Up and down (raise, lower; hill, valley; above, below . . .)
Volume (mass, quantity; full, empty; loud, soft; light, dark; weight . . .)

INDEX

- Abortion, 55
- AC (*see* Alternating current, 81)
- Accommodations and travel, 34–38
 - lodgings, 130
 - terminals, 36–38
- Acids, amino, 57
- Acknowledge, 60
- Active, 89
- Add, 114
- Adding machines, 64
- Address, 61
- Admissions, 117
- Admittances (*see* Admissions, 117)
- Aerials, 71, 83
- Aesculapius' staff, 113, 119
- After, 150
- Age:
 - annual, biennial, perennial, 56
 - of livestock, 41–43
 - mature forest, 44
 - old and new world, 56
- Agriculture, 39–47
 - agronomy, 39–41
 - farm structures and lands, 43–44
 - forestry, 44–45
 - implements, 45–47
 - livestock and dairy products, 41–43
 - vehicle controls, 160, 164–165
- Agronomy, 39–41
- Air, 57, 86
 - circulating, 160
 - conditioning, 159
 - (*See also* Fan; Ventilation control)
 - cooled condenser, 83
 - filter, 157
 - freight, 38
 - marshalling signals, 152
 - pollution, 162
 - pressure, 157
 - traffic, 150–152
 - vane, 107
- Aircraft:
 - badly damaged, 141
 - low-flying, 144
 - on-board signs, 36
 - three-dimensional controls, 164–165
- Airports, 36, 93
- Alchemy, 86–88
- Alcohol, 86, 91
- Algae, 97
- All right, 91
- Alphabets, non-graphic, 75–79
- Alternate instructions, 150
- Alternating current, 81
 - AC adapter, 63
- Alternative instructions (*see* Alternate instructions, 150)
- Alum, 87
- Ambulance, 117
- Amino acids, 57
- Ammeter, 128, 159
- Ampersand, 58
- Amphitheater, 130
- Amplifier, 71, 82
 - image, 116
- Anastomosis, 93
- Anchoring, 153
- And, 58
- Animal:
 - crossing, 144
 - drawn vehicles, 145
- Animals, 142*n*.
 - live, 99
 - livestock, 41–43
- Ankle, 74
- Antenna, 83
 - (*See also* Aerials)
- Antimony, 86
- Appliances, 101–103
 - electric, 105
- Appointments, 117
- Approximately equal to, 111
- Aqueduct, 93
- Archery, 132
- Architectural materials, 50–51
- Architecture, 48–53
 - drafting, 48–51
 - landscaping and planning, 51–53
- Arenas, 53
- Arsenic, 86
- Ascend (*see* Up and down, 26, 157)
- Ashlar, 50
- Ashtray, 36, 130, 159
- Assembly, 104
- Asterisk, 58
- Astrology, 88–90
 - (*See also* Astronomy)
- Astronomy, 54
- At, 58
- Athletics (*see* Sports)
- Atomic power, 105
- Atomizer, 47
- Audio-visual indicator, 72
- Auditorium, 131
- Auger, 161
- Autoclave, 80
- Automat, 36
- Automatic, 60, 115
 - cycle, 108
- Automotive service, 65
 - (*See also* Car; Vehicles)
- Autumn, 89
- Avalanches, 132, 148
- Axle, 161
- Baggage, 37
 - (*See also* Luggage)
- Balance, 46, 98
 - level, 127
- Band, 131

- Bar, 36
 - snack, 35
- Barber, 65
- Barman, 35
- Barometric condenser, 80
- Barricade sign, 48
- Baseball, 132
- Basic symbols, 26-27
- Basket lift, 161
- Bath, 34-35, 49, 130
 - sauna, 35
- Bathrooms (*see* Toilets)
- Battery, 67, 82, 126
 - slave, 159
- Battlefield, 95
- Bauxite, 105
- Beach, 94, 131
- Beacon, boundary, 92
- Bear area, 131
- Beater, 110
- Beauty parlor, 65
- Bedding, 99
- Before, 150
- Behavior, 52
- Bell, 60, 83
 - buoy, 154
- Bellboy, 35
- Belt, 107
- Benzene, 68
- Berries, 40-41
- Beware, 146
 - (*See also* Caution; Danger; Warning)
- Bibb, hose, 50
- Bicycle, 51, 145
 - dispatch, 37
 - shed, 37
 - trail, 131, 147
 - (*See also* Cycling, 136)
- Bidet, 49
- Billiards, 132
- Biodegradable, 102
- Biohazard warning, 140
- Biology, 55-57
 - botany, 56
 - molecular, 57
- Birth, 113
 - control (*see* Planned parenthood, 114)
- Black, 237
- Blackening, 116
- Blankets, 99
- Blender, 102
- Blood:
 - bank, 117
 - donors, 117
- Blower, 80, 83, 102
 - leg plate, 109
 - (*See also* Fan)
- Blowing unit, 107
- Blue, 235
- Boating, 131
 - (*See also* Canoeing, Rowing, Sailing, 135)
- Body (movement), 74
- Bonds, 68
- Book stall, 65
- Boom, loader, 161
- Borax, 87
- Botany, 56
- Boundaries, 92, 95
- Braille, 75-79
- Brake, 107, 158
 - apply, release air, 155
 - hand, 158
 - Jacobs (engine with), 157
 - oil, 158
 - pressure, 158
 - stop and check, 147
 - winch, 161
- Brick, 50
- Bridge opening, 148
- Bridges, 92, 130, 143, 144, 147
- Bridle path, 147
 - (*See also* Horses)
- Brightness, 116
- Brown, 236
- Bucket, loader, 161
- Buddhism, 138
 - pagoda, 95
- Building signage:
 - accommodations and travel, 34-38
 - facilities, 34-35
 - food and drink, 35-36
 - group room, 70
 - hospitals, 117-119
 - post office, 70
 - press room, 70
 - recreation, 130-137
 - safety, 140-141
 - shops and services, 65-66
 - studio, 70
 - switchboard, 70
 - telegram, 70
 - telephone, 70
- Buildings, 51
 - castle, 95
 - churches, 95
 - farmstead, 43
 - hospital, 95
 - masonry, 43
 - military, 95
 - offices, 93
 - planning, 53
 - ranger station, 95
 - schools, 95
 - shed, 43
- Bulb, lamp, 82
- Bump, 143
- Buoys, 94, 153-155
- Bus, 37, 142
 - no entry, 145
 - stop, 147
- Business, 58-66
 - camera store, 65

- Business (*cont.*)
 - computers, 58–62
 - office equipment, 63–65
 - office procedure (*see* Hospitals, 117)
 - shops and services, 65–66
- Button, 100
- Buttonhole, 100–101
- Buzzer, 64, 83
-
- Cab (*see* Taxi, 37)
- Cabin, 130
- Cable, 93
 - overhead, 144, 153
- Caduceus, 113, 119
- Cafe (*see* Coffee shop, 35)
- Calendering, 104
- Calx, 87
- Cam, 108
- Camera point, 130
- Camera store, 65
- Cameras, 70
 - (*See also* Photography, 126–127)
- Campfires, 130
- Campground, 130
- Camping site, 148
- Canals, 93
- Cancel, 59
- Candy, 110
- Candy store, 65
- Canoeing, 135
- Capacitors, 82
- Capital city, 92
- Car, 51, 71, 142
 - rental, 37
 - wash, 65
 - (*See also* Automotive service; Vehicles)
- Cards:
 - computer, 59
 - playing, 133*n.*
 - tarot, 133
- Care:
 - handle with, 98
 - in care of, 58
 - labeling, 100–101
- Carried over, 58
- Cartesian coordinates, 128
- Cartwheel, 74
- Casting, 104
- Castle, 95
- Cathedral, 95
- Cathode ray tube (TV), 82
- Cattle, 42
- Caustic, 115
 - (*See also* Corrosive, 99)
- Caution, 142, 143
 - deep water (drop-off), 131
 - pressurized radiator, 157
 - red light soon, 148
 - rocks, 131
 - (*See also* Beware; Danger; Warning)
-
- Caverns, 131
- Ceiling:
 - heights, 52
 - light outlet, 49
 - mounted equipment, 115
- Cemetery, 95
 - boundary, 92
- Center, 72
 - of gravity, 98
 - line, 48, 149
 - (*See also* Balance)
- Centre (*see* Center)
- Centrifugal:
 - fertilizer, 47
 - pump, 80, 83
- Centrifuge, 80, 114
- Ceramic industry, 105
- Cereals, 39
- Chain, 107
- Chalk, 97
- Change, 113
- Channel crossing, 152–154
- Chemical:
 - engineering, 80–81
 - industry, 105
- Chemist (*see* Pharmacy, 65)
- Chemistry, 67–69
- Chess pieces, 133*n.*
- Chest, 74
- Chickens, 42
- Children:
 - can play in the street, 147
 - child care, 52, 117, 119
 - crossing, 144, 147
 - keep away from, 140
 - lost, 34
 - mother and, 38, 90
 - offspring, progeny, 55
 - pediatrics, 117
 - relief shipments, 99
- Choke, 158
- Christianity, 138
 - church, 95
- Chrome, 105
- Church, 95
- Cigarette lighter, 159
- Circuit:
 - breaker, 82
 - diagrams, 71–72
- Circumduction, 113
- Cistern, 43, 50
- Citation, incorrect (*see* Incorrect citation, 55)
- City, 92
- Civil defense, 140
- Clamp, 162
- Clay, 87
- Cleaner, 46
- Clear, 62
- Clearance, 157
 - total, 64

- Climbing plant, 56
- Clinic, 117
- Cloakroom, 34
- Clock:
 - electric system devices, 49
 - hanger outlet, 48
- Clockwise, 74, 157
- Closed (*see* Open and close)
- Clothing, 66
 - care labeling, 100–101
 - clean, soiled, 117
 - protective, 141
 - relief shipments, 99
 - washing machines, 103
- Clouds, 121–122, 126
- Club, 38
- Clutch, 108, 158
- Coagulation, 115
- Coal, 97
 - mining, 105
- Coatroom (*see* Cloakroom, 34)
- Cobalt, 86
- Cocktail lounge (*see* Bar, 36)
- Code, 61
- Coffee, 39
- Coffee shop, 35
- Cold (*see* Temperature)
- Collate, 59
- Collator detector, 110
- College, 95
- Collimator, 128
- Color, 231–246
 - correction, 73
- Colour (*see* Color)
- Combines, 160*n.*–161*n.*
- Combustible, 98
- Comet, 54
- Comfort station (*see* Toilets)
- Common substances, 69
 - (*See also* Compounds and Mixtures, 87–88)
- Communications, 70–79, 93
 - movement and dance, 74
 - non-graphic alphabets, 75–79
- Comparator, 61
- Comparison, 61
- Compass required, 141
- Compounds, 87–88
 - (*See also* Common substances, 69)
- Compressed gas, 99, 157
- Compression, 116
 - molding, 104
- Compressors, 83
 - (*See also* Pump)
- Computers, 58–62
 - numerical tape control, 108
- Concentration, 113
- Concrete, 50
- Condenser:
 - air-cooled, 83
 - barometric, 80
- Condenser (*cont.*):
 - electrical (*see* Capacitors, 82)
 - water-cooled, 83
- Confectionery store (*see* Candystore, 65)
- Conference, 64
- Confucianism, 138
- Conjunction, 54
- Connector (electrical), 83
- Constellations, *see* Astronomy, 54
- Contains, 111
- Continued, 58
- Continuity, 52
- Continuously, 61
- Contours: hydrographic, 94
 - relief, 94
- Contrast, 70, 116
- Control characters (computers), 59–60
- Converter, 71
- Conveyors, 80, 161
- Copper, 86, 105
- Copyright, 58
- Coral, 96
- Cork, 51
- Correction key, 64
- Corridors, 52
- Corrosive, 99
 - (*See also* Caustic, 115)
- Cosmetics, 66
- Cotton, 39
 - picking, 161
- Counter, 61
- Counter-clockwise, 74, 157
- County boundary, 92
- Coupling, 128
 - insulated, uninsulated, 82
- Courthouse, 91
- Crane, movable manure, 46
- Creation, 89
- Creeper, 110
- Creeping plant, 56
- Crime, 91
- Crops (*see* Agronomy, 39–41)
- Cross, 151
 - airway, 150
 - channel, 153
- Crosses, Christian, 138
- Crossings, larger waterway, 153
- Crossroads, 143
- Crucible, 86
- Crusher:
 - ball mill, 80
 - mill, 46
 - roller, 80
- Crystal:
 - structures, 69
 - unit, piezoelectric, 82
- Cultural features, 95
- Cultural movement, 131
- Cum, 113
- Curb markings, 148

Currency, *see* Business, 58
 exchange, 37
 Current, 81, 115
 Curtains, 103
 Curve, 108
 Customs, 38
 Cuts, 94, 106
 Cutter bar, 161
 Cutting, 100, 115
 line, 100
 Cycling, 136
 lane, 149
 (*See also* Bicycle)
 Cylinder, remote, 161

Dagger, 58
 Dairy products, 42
 Dams, 93, 131
 Dance, 74
 Danger, 154
 point, 148, 154
 (*See also* Beware; Caution; Warning)
 Dangers, 144
 Dark and light, 27
 Data processing (*see* Computers)
 David, Star of, 113, 139
 Day, 86, 160
 Days of week, *see* Folklore, 89
 DC (*see* Direct current, 81)
 Deaf alphabet, 75-78
 Death, 55, 90, 113, 133
 character kill, 72
 reception, refrigeration of cadavers, 118
 Decimal sign, 64
 Decision, 58
 Decompression, 116
 Decrease (*see* Increase and decrease)
 Deer area, 131
 Defecation, 113
 Delivery entrance, 34
 Demons, against, 47
 Dentist, 118
 incisors, molars, 114
 Dermatology, 118
 Descend (*see* Up and down)
 Detector, collator, 110
 Diamond, 105
 Dictating machines, 63
 Dictation, 63
 Diesel fuel, 158
 Differential lock, 161
 Digestion, 88
 Dip, 143
 and strike, 96
 Dipole:
 antenna, 83
 electric, 128
 magnetic, 128
 Direct current, 81
 Direction, 27, 74

Disabled (*see* Handicapped, 117, 140)
 Disciplines, 32-165
 Disengage (*see* In and out)
 Dispensary (*see* First aid, 140)
 Dispense, 114
 Dissolution, 88
 Distillation, 88
 Disturbance, 108
 Diver's flag, 154
 Divided by, 111
 Diving, 131
 Dock, 131
 Doctor:
 on board, 76
 required (medical assistance), 77, 141
 Document, 59
 Dog, 91, 130
 Dollar, 58, 85
 Double expose, 72
 Down (*see* Up and down)
 Drafting, 48-51
 Drain, 107
 Draining, 102
 Dram, 114
 Dressing rooms, 117
 Dressmaking, 100
 Dreydle, 133*n.*
 Drift, 143
 Drilling cut, 106
 Drink, 35-36
 Drinking:
 fountain, 36, 50
 trough, 43
 water, 36, 90, 153
 Drive, 102, 158
 belt, 107
 chain, 107
 front-wheel, 158
 gear, 107
 wheels, 110
 Drugstore (*see* Pharmacy, 65)
 Dry, 98
 Dryers (*see* Chemical engineering, 80)
 Drying, 101, 103
 Duck, 43
 Dunes, sand, 94, 96
 Dust, 120
 Dwellings, 93

Earth, 50, 54, 86, 89
 ground, electrical, 82
 (*See also* World)
 Ecology, 57
 Egg, 42, 55
 Eject, 63
 lamp, 126
 Ejector, 80
 Elbow, 74
 Electric:
 appliances, 105

- Electric (*cont.*):
 - eye, 49
 - facilities, 140
 - knife, 102
 - motor, 106
 - razor socket, 35
 - transmission, 105
- Electrical:
 - danger, 140
 - engineering, 81-83
 - precipitator, 80
 - schematic diagrams: architecture, 48-49
 - circuit, 71-72
 - electronic, 81-83
 - supply, 66
- Electricity:
 - electrical engineering, 81-83
 - meter, 49
 - physics, 128-129
- Electromedical equipment, 115
- Electronic schematic diagrams, 81-83
- Elements (chemical), 67, 86-87
(*See also* Mining)
- Elevation, 95
 - drawings, 50*n.*-51*n.*
- Elevator, 34
 - mobile, 46
 - ramp, 52
- Eliminator, static, 110
- Emergencies, 117
- Emergency code, 141
- Emergency exit, 140
- Empty (*see* Volume)
- End (*see* On and off)
- Endoscopy, 115, 118
- Engage (*see* In and out)
- Engine, 83
 - hours, 157
 - with Jacobs brake, 157
 - oil, 157
 - pressure, 157
 - speed (in RPM), 157
 - stop (emergency), 159
- Engineer required, 141
- Engineering, 80-85
 - chemical, 80-81
 - electrical, 81-83
 - mechanical, 83-85
- Entomology, *see* Biology, 55
- Entrance (*see* In and out)
- Entry (*see* In and out)
- Equal to, 111
- Equestrian, 136
- Equinox, 54
- Equipment:
 - kitchen, 44
 - in medicine, 114-116
 - office, 63-65
 - X-ray, 115-116
- Error, 108
(*See also* Incorrect citation; Mistake)
- Escalator, 34
- Escape route, 140
- Essence, 89
- Eternal state of Buddha, 138
- Even, 61
- Exit (*see* In and out)
- Expansion, 52
- Explorer routes, 95
- Explosive, 75, 98
- Extract, 59
- Eye, 128
 - level, 51
- Factory, 93
 - district, 104
- Falling objects, 140
- Fallout shelter, 140
- Family, 90
 - life, 89-90
- Fan, 80, 126, 160
 - alluvial, 96
 - cotton blowing, 161
 - ventilator, 43
(*See also* Air, conditioning; Blower; Ventilation control)
- Faradization, 115
- Farm (*see* Agriculture)
- Farmstead, 43
- Fast (*see* Speed)
- Fasten seat belt, 36
- Fault, 96
- Feed, 63, 106
 - film, 116
 - form, 60
 - line, 60
 - ribbon, 64
- Feeder, 109, 110
- Female (*see* Male and female)
- Fences, 43, 51
- Fermentation, 88
- Ferry, 36, 147
 - captive, 153
 - vehicle, 131
- Fertility, 47
- Fertilizers, 41
- Feynman diagrams, 128*n.*
- Fill, 94
- Filling station, 148
- Film, 70-71, 126-127
(*See also* Motion pictures)
- Filter, 107, 157
 - air, 157
 - cleaning, 107
 - magnetic, 107
 - oil, transmission, 158
 - plate and frame, 80
 - rotary vacuum, 80
 - type "A," 126
- Find, 61
- Fingers, 74

- Fire, 86
 - alarm, 140
 - system devices, 49
 - area, 147
 - extinguisher, 36, 165
 - prevention, 130
 - protection equipment, 141
 - sacred, 139
 - safety, 140-141
- Firearms, 132
 - required, 141
- First aid, 140
- Fish, 97
 - hatchery, 131
 - trap area buoy, 155
- Fishing, 131
- Fixation, 88
- Flag, diver's, 154
- Flags, international, 75-79
- Flame photometer, 114
- Flats, 94
- Float (hydraulic lift), 157
- Floodlights, 49
- Floor:
 - heat, 159
 - mounted equipment, 115
 - outlets, 48-49
- Flow charts (*see* Programming, 58-59)
- Flowers, 39
 - florist, 65
- Fluorescent lamps, 49
- Fluoroscopy, 116
- Focus, 126, 165
- Fog, 120
- Foliation, 96
- Folklore, 86-91
 - alchemy, 86-88
 - astrology, 88-90
 - hobo signs, 90-91
- Food, 35-36
 - processing, 104
 - required, 141
 - (*See also* Agronomy, 39-41; Livestock and dairy products, 41-43)
- Foot, 74
 - control, 63
 - switch, 108, 115, 116
- Football, 132
- Footnote, 58
- Footplate motion, 116
- Foraminifera, 96
- Forbid, 142
- Forest fire prevention, 130
- Forestry, 44-45
 - (*See also* Vegetation, Natural features, 95)
- Fork lifts, 161*n.*-162*n.*
- Forward and reverse, 126, 157
 - back, 155
 - backspace, 59, 64
 - carriage return, 60, 64

- Forward and reverse (*cont.*):
 - dance, 74
 - dictation, 63
 - fast forward, backward, movement, 63, 103
 - fork lifts, 162*n.*
 - forward, backward, 60
 - longitudinal: feed, 106
 - motion, 116
 - move ahead, back, 152
 - playback, 63
 - recording heads, 82
 - return travel, 60
 - reverse, 64
 - counter, 72
 - course, 150
 - stitching, 101
 - reversible reaction, 67
 - reversing, 142
 - tab, 64
 - tape, 108
 - three-dimensional structure, 68
- Fossils, 96-97
- Found (*see* Lost and found, 34)
- Fountain, 51
 - drinking, 36, 50
 - ink, 109
 - water, 109
- Fragile, 98
- Freight, air, 38
- Frequency, 71
- Frictionless contact, 128
- Front-wheel drive, 158
- Frozen, 98
- Fruits, 40-41
- Fuel, 158
 - diesel, 158
 - required, 141
 - shut-off, 158
 - system, 164
 - tank selector, 158
- Fulcrum, 128
- Fulguration, 115
- Full (*see* Volume)
- Fuse, 82, 115
- Galvanization, 115
- Galvanometer, 128
- Games, 133
 - indoor, 66
- Gammadion, 127
- Garbage (*see* Trash)
- Garden, 44
- Gas:
 - compressed, 99, 157
 - expelled, 67
 - filling station, 148
 - flow, 80
 - holder, 80
 - line, 84
 - well, 96

Gastropods, 97
 Gate, 144
 Gauge:
 pressure, 84
 thermometer, 84
 Gear:
 box, 161
 drive, 107
 high-ratio, 158
 Gearshift, 165
 Generator, 71, 159
 emergency power, 71
 signal, 71
 Genetics, *see* Biology, 55
 Geography, 92–95
 Geology, 96–97
 Geometric tolerances, 84–85
 Gift shop, 65
 Glaciers, 94
 Glass, 50, 86
 Glider flights, 151
 Glimpse, 52
 Goats, 42
 Godhead, 89
 Gold, 86, 105, 236
 Golf, 132
 Golf course, 95
 Good luck, 47
 Goods, handling of, 98–99
 Grade crossing, 144, 146
 Grain, 39
 Graphic form, 166–230
 Grassed area, 51
 Grasses, 40
 Gravity, center of, 98
 Gray, 237
 Grease, 160
 Greases, 109, 160
 Green, 235
 Grill, 36, 102
 Grinder, 102
 Grinding, 106
 Grindstone, 46
 Grocery, 65
 Ground (electrical), 82
 Ground-air emergency code, 141
 Group room, 70
 Groups, 126
 Growth, 52
 Guard on duty, 131
 Gypsum, 50, 97

 Hail, 120
 Hairdresser (*see* Barber, 65)
 Halfnut, 107
 Hamlet, 92
 HAMS code, 51*n.*, 52*n.*
 Hand, 74
 control, 108

Hand (*cont.*):
 switch, 116
 Hand tools, 45
 Handicapped, 117, 140
 Handle with care, 98
 Handling of goods, 98–99
 Hangars, 38
 Hanging plant, 56
 Hardware, 66
 Harness, 46
 Haze, 120
 Head, 55, 74
 Header, 160
 Headphone, 63
 Heads (recording), 82
 Health:
 center, 95
 public, 38
 Hearing, 118
 Heat (*see* Temperature)
 Heater, 82, 158
 Heavy, 157
 Heavy-duty machinery, 105–110
 Height (*see* Measurement)
 Heliport, 36, 151
 Hemispheres, 56
 Hermes, staff of, 113, 119
 Hex signs, 47
 Highways, 92
 Hill, 51
 Hinduism, 138–139
 Hinge, 128
 Hip, 74
 Historic plaque, 131
 Hobo signs, 90–91
 Hoist:
 control, 161
 grab, 46
 Home economics, 100–103
 appliances, 101–103
 Hooks, 98
 Horizontal:
 bed, 96
 tabulation, 60
 Horn, 159
 blowing, 145
 sound, 147, 152
 Horses, 41, 131
 (*See also* Bridle path, 147;
 Equestrian, 136)
 Horticulture (*see* Botany, 56)
 Hose bibb, 50
 Hospital, 95, 117, 147
 heliport, 151
 Hospitals, 117–119
 Hostel, youth, 148
 Hot (*see* Temperature)
 Hotel, 35
 reservations, 35
 Hour, 86

Household goods, see Shops and Services, 65–66

Houses (*see* Dwellings, 93)

Human, 51

Hunting, 132

Hurricane, 120

Hybrid, 55, 56

 resonance structure, 68

Hydraulic:

 lift (float), 157

 machinery, 83*n.*

 pump, 83

 reservoir, 158

Hydrographic features, 93–94

Hydrotherapy, 118

Ice:

 pack, 93, 94

 skating, 133, 137

Identical with, 55

If and only if, 111

Ignition, 158

 system, 164

Illumination (*see* Light)

Implements (farm), 45–47

Implies, 111

In and out, 27, 157

 absorptive transition, 128

 access denied, 92

 air brakes, 155

 axle connect, 161

 baggage, 37

 data out, 108

 departing, arriving flights, 37

 depress, 124

 dispense, 114

 do not enter, 149

 eject, 63

 lamp, 126

 engage and disengage, 157

 clutch, 158

 hand brake, 158

 plate rollers, 109

 tracer, 106

 winch, 161

 enter, leave control area, 151

 entering larger waterway, 153

 entrance, 34

 connector, 59

 locations, 52

 one, 43

 shape, 52

 tributary, 153

exit, 34

 connector, 59

 emergency, 140

 illuminated sign, 48

external, internal channel, 62

extract, 59

feed, 63

film thread, 126

In and out (*cont.*):

 fork lifts, 162*n.*

 in position, 108

 incoming, outgoing, 67

 indoors, 126

 input/output, 59, 60

 insert, pull chocks, 152

 let out, 100

 mail sending, receiving, 70

 manual data input, 108

 merge, 59

 microphone input, output, 63

 no entry, 34, 140, 145, 146

 owner is, 90

 project, 126

 quick release coupler, 161

 radiative transition, 128

 receiver, 71

 release, 124

 remote cylinder (extended and retracted), 161

 remove, 63

 shift in, out, 59

 take in, 100

 three-dimensional structure, 68

 transfer, 114

 transmitter, 71

 transverse: feed, 106

 motion, 116

 vector direction, 128

Included in, 111

Incorrect citation, 55

 (*See also* Error; Mistake)

Increase and decrease, 27

 add, 114

 approach to grade crossing, 146

 blower, 102

 change, 113

 contrast, 70, 73

 coolant fluid, 107

 crescendo, 124

 decrescendo, 124

 delete, 72

 detail, 73

 dim lights, 145

 divided by, 111

 dot (music), 123*n.*

 double expose, 72

 expansion, 52

 flat, 124

 focal spot, 116

 growth, 52

 heat, 102

 heating control, 35

 heavy, light fog, 120

 height, 70

 increasing action, 103

 insert, 72

 lamp, 126

 lengthen, 100

 let out, 100

- Increase and decrease (*cont.*):
 lighten, darken, 127
 merged in, 56
 mild severe, 113
 multiplied by, 111
 multiplier, 61
 non-linear variability, 82
 per cent, 58
 phenomenon, 120
 radiation, 115
 radioactivity, 98
 rain, 120
 repeat, 62
 repeater, 72
 road narrows, 143
 sensitivity, 63
 sharp, 124
 shorten, 100
 size, 70
 space expand, 65
 speed control, 63
 steam, 83
 stepless regulation, 108
 by steps, 81
 swell, 124
 take in, 100
 unit add, 72
 variable control, 81
 ventilation control, 35
- Incubator, 47
 perinathology, 118
- Index, 58, 110
- Indicator, 82
- Inductor, 82
- Industrial vehicle controls, 161
- Industries, 104–105
- Infinity, 111, 126
- Inflammable, 98
- Information, 34, 146
- Inheritance, 55
- Injections, 113
- Injury, 142
- Ink, 87, 109
- Insecticide, 41
- Inspection (police), 145
- Inspection (quality control), 104
- Insulation, 50, 64
- Insured mail, 70
- Intellect, 89
- Interchange, 92
- International:
 boundary, 92
 flags, 75–79
 flights, connecting, 37
 parcel post, 70
 telephone, 70
- Intersection, 111, 143
- Invert type, 73
- Ionizing rays, 140
- Iron, 86, 105
 industry, 104
- Ironing, 101
- Islam, 139
 mosque, 95
- Isobaths, 94
- Jacobs brake (engine with), 157
- Jail, 91
- Jainism, 139
- Jeep trail, 131
- Jog, 106
- Jogger, 110
- Join airway, 150
- Judaism, 139
 synagogue, 95
- Jump, 61
- Jupiter, 54
- Justice, 47, 133
- Keep out, 34
 access denied, 92
- Kennel, 130
- Kerb markings (*see* Curb markings)
- Key:
 board, 60
 signatures (music), 125
- King, 133
- Kitchen, 44
 equipment, 102
 ware, 66
- Knee, 74
- Knife:
 edge, 128
 electric, 102
- Kymograph, 116
- Laboratory, 117
- Ladder, 45
- Lakes, 43, 93–94
- Laminating, 104
- Lamp, 126
 bulb, 82
- Land, 57
 forms, 94
- Landscaping, 51
- Landslide, 96
- Lane line, 149
- Large (*see* Measurement)
- Larger than, 111
- Laser, 140
- Latrine (*see* Toilets)
- Laundry, 35
 (*See also* Home economics, 100–103)
- Lava, 96–97
- Lavatory (*see* Toilets)
- Law, wheel of, 138
- Lead, 105
- Left, 26
- Lenses, 128

Less (*see* Measurement; Volume)
 Levee, 94
 Level, 74, 127
 crossing (*see* Grade crossing)
 high, low, 157
 Lever arm, 128
 Lifeguard (*see* Guard on duty, 131)
 Lift (*see* Elevator, 34)
 fork, 161*n.*–162*n.*
 here, 98
 hydraulic (float), 157
 insert lift cart here, 98
 power, 46
 Light (illumination):
 blinking, 144
 bulb (*see* Lamp bulb, 82)
 and dark, 27
 fluorescent lamp, 49
 illumination, 116
 outlet, 49
 oven, 102
 pools of, 53
 reading, 36
 red, 116
 source, 128
 street, 49
 switch, 35, 159
 traffic, 48
 (*See also* Lights)
 Light (weight), 157
 Lighted buoy, 154
 Lighter, cigarette, 159
 Lighthouse, 94, 131
 Lighting, 49
 system, 164
 Lightning, 120
 against, 47
 arrester, 82
 Lights:
 dim, 145
 low beam, 145
 marine, 154–155
 parking, 147
 traffic, 148
 vehicle, 159
 (*See also* Light)
 Limit:
 belt, 63
 of seaborne traffic, 93
 stacking, 98
 Limited motion, 105, 106
 Limiter, 71
 Limousine, 37
 Lines, drafting, 48
 Liquid manure, 41
 Liquids, 114
 Liquor, 65
 Listen, 63
 Litter, do not, 38
 Livestock, 41–43

Loader bucket, 161
 Loading (times), 148
 Lock (*see* Open and close)
 Locker:
 baggage, 37
 luggage, 66
 Lodgings, 130
 Logarithm, 112
 Longer than, 55
 Loosen, 157
 (*See also* Open and close)
 Lost:
 child, 34
 and found, 34
 Loudspeaker, 64, 82
 volume, 70
 Lounge, cocktail (*see* Bar, 36)
 Lower, 157
 (*See also* Up and down)
 Lubricant pump, 106
 Lubricate, do not, 140
 Lubrication, 108–109, 160
 press, 108
 Luck, 47
 Luggage, 37, 66
 locker, 37, 66
 Lumber industry, 105

 Machine controls (computers), 60–62
 Machinery, heavy-duty, 105–110
 Machines:
 adding, 64
 dictating, 63
 hydraulic, 83*n.*
 pneumatic, 83*n.*
 printing, 109–110
 sewing, 65, 101
 vending, 36
 washing, 102–103
 Magen David Adom, 113*n.*
 Magnesium, 105
 Magnet:
 beam-bending, 128
 focusing, 128
 permanent, 83
 Magnetic:
 filter, 107
 ink characters, 58
 Magnetism, *see* Physics, 128
 Magnetized materials, 99
 Maid, 35
 Mail, 70
 carrying, 78
 Mailbox, 70
 Maintenance, 104
 Male and female, 26, 55
 clothing, 66, 99
 connector (electrical), 83
 dressing rooms, 117
 elements, 89

Male and female (*cont.*):

- man, woman, 89
- mare, 41
- men's, women's cloakroom, 34
- men's, women's shower, 35
- men's suits, 66
- nuclei, 56
- stallion, 41
- stewardess call, 36
- toilets for, 34
- women's wear, 66

Malfunction, 108

Man, 89

(*See also* Male and female)

Mandala, 138

Manganese, 105

Mangrove, 95

Manual, 115

- alphabet, 75-78
- data input, 108
- input, 59
- operation, 58
- steering, 108

Manually, 60

Manufacturing, 104-110

- heavy-duty machinery, 105-110

Map:

- required, 141
- symbols, *see* Geography, 92-95

Marble, 50, 97

Margins, 64

Marina, 131

Marine traffic, 152-155

Market, 65

Mars, 54

Marsh, 95

- swamp plant, 56

Marshalling signals, 152

Masonry, 43

Mass, 128

Maternity, 118

Mathematics, 111-112

Mating, 55

Measurement:

- alter to size indicated, 73
- amount of check, 58
- approach to grade crossing, 146
- arena diameter, 53
- building, 51
- camera/subject distance, 126
- channel, 153
- clearance, 157
 - height, width, length, 145
- counter, 61
- dimensions, 98
- drafting lines, 48
- elevation, 95
- geometric tolerances, 85
- height, vehicle, 145
- large, small, 26

Measurement (*cont.*):

- larger than, 111
 - or equal to, 111
- length, 60
 - vehicle, 145
- lengthen, 100
- level, 74
- limit, belt, 63
- longer than, 55
- magnitude, 54, 112
- measure, 123
- measured by, 111
- measuring, 108
- much larger (smaller) than, 111
- narrow bridge, structure, 144
- number, 58
- particle, small and large, 41
- precipitation far or near station, 120
- shorten, 100
- shorter than, 55
- smaller than, 111
 - or equal to, 111
- stack: height, 109
 - range, 109
- type composition, 72
- weight, vehicle, 145
- width, vehicle, 145
- window height, 53

(*See also* Volume)

Mechanic, 65

Mechanical engineering, 83-85

Medical:

- assistance (doctor) required, 77, 141
- records, 117
- supplies, require, 141

Medicinal plants, 39

Medicine, 113-119

- equipment, 114-116
- hospitals, 117-119

(*See also* Doctor)

Meditation, 117

Meeting point (*see* Rendezvous point, 34)

Megaphone, 36

Memory, 61

Men's toilet, 34

Mental hygiene, 118

Mercury, 54, 87

- staff of, 113, 119

Merge, 59

Metal, 51

Metallurgy, 104

Metalworking, 104

Meteorological station, 44

Meteorology, 120-122

- storm warnings, 153

Meter, 50

- electricity, 49

Methane, 68

Metropolis, 92

Microphone, 70, 82
 input, output, 63
 socket, 63
 Military installation, 95
 Milk, 42
 Milling, 106
 Mincer (*see* Grinder, 102)
 Mineral spring, 131
 Minerals, *see* Geology, 97
 (*See also* Architectural materials, 50-51)
 Mines, 94, 96
 Mining, 105
 prospect, 95
 Mirror, 128
 image, 108
 Misce, 113
 Mission, 95
 Mistake, 60
 (*See also* Error; Incorrect citation)
 Mix, 113, 114
 Mixer, 46, 71, 80, 102
 jet, 80
 Mixtures, 87-88
 Modify, 61
 Modulator, 71
 Mohammedan mosque, 95
 Molding, 104
 Molecular biology, 57
 Money:
 dollar, peso, etc., 58
 orders, 70
 (*See also* Currency)
 Monorail, 36
 Month, 86
 Monument, cultural, 131
 Moon, 133
 Mooring, 153
 buoy, 154, 155
 More (*see* Measurement; Volume)
 More or less (*see* Plus or minus, 111)
 Morse code, 75-79
 Mosque, 95
 Mother and child, 38, 90
 Motion, 27, 105-107, 116
 Motion pictures:
 fluoroscopic, 116
 (*See also* Film)
 Motor:
 electric, 106
 vehicles, 145
 road for, 146
 Motorcycle, 37, 142, 145
 Motors, 83
 Mountain, 51
 pass, 95
 Movement and dance, 74
 Moving stairway (*see* Escalator, 34)
 Mud flat, 94
 Multiplied by, 111
 Museum, 131

Music, 123-125
 band, 131
 record shop, 65

 Natural features, 95
 Nature, 89
 Nautical charts, 155
 Navigation, 152-155
 Negation, 60
 (*See also* Prohibition)
 Negative charge, 67, 128
 Neptune, 54
 Neurology, 118
 Neutral, 158
 New world, 56
 Newsstand, 37
 Nickel, 87, 105
 Night, 86, 160
 No, 76, 141
 No passing, 145, 146, 153
 No riding, 140
 Noise, 57
 Noisy area, 52
 Non-graphic alphabets, 75-79
 Northern hemisphere, 56
 Not, 60
 Note (music), 123
 Notions, 65
 Numerals, non-graphic, 78-79
 Numerical tape control, 108
 Nurse, 117
 call system devices, 49
 Nursery, 34, 118

 Oasis, 95
 Occupational therapy, 117
 Occupied:
 seat, 36
 toilets, 36
 Odd, 61
 Off (*see* On and off)
 limits (*see* In and out, no entry)
 Office:
 architectural planning, 51-53
 buildings, 93
 equipment, 63-65
 procedure (*see* Hospitals, 117)
 Offspring, 55
 Oil, 87, 160
 brake, 158
 engine, 157
 filter (transmission), 158
 industry, 105
 level window, 108
 pressure:
 brake, 158
 engine, 157
 transmission, 158
 required, 141
 temperature (transmission), 158

- Oil (*cont.*):
 - transmission, 158
 - well, 96
- Oils, 108–109, 160
- O.K., 90, 129
- Old world, 56
- Olympics, 134–137
- On and off, 26, 64, 107, 115, 157
 - in action as long as button is operated, 107
 - beginning motion, 107
 - brake, 107
 - end:
 - finished, 60
 - of letter, 63
 - of medium, 60
 - of operation, 62
 - of text, 60
 - of transmission, 59
 - of transmission block, 60
 - go, 155
 - heater, 159
 - ignition, 158
 - ink flow, stop, 109
 - lamp, 126
 - moving car, 142
 - online, offline storage, 59
 - pedestrians may cross, wait, 148
 - power, 159
 - power take-off, 161
 - proceed, 155, 156
 - radio, 159
 - start, 63, 103, 107, 114
 - do not, 140
 - engines, 152
 - feed, 106
 - of heading, 60
 - operation, 60
 - of text, 60
 - of winding, 81
 - start and stop with same button, 107
 - stop, 60, 63, 107, 114, 143, 148, 149, 152, 155, 156
 - ahead, 144
 - compulsory, 145
 - emergency, 107
 - engine (emergency), 159
 - final bar, 123
 - halt, 90
 - instantly, 76
 - machine, 72
 - master, 107
 - obligation to, 152
 - train coming, 148
 - stopped:
 - car, 142
 - tone, 125
 - stopping motion, 107
 - switch, 60, 82
 - television camera, 70
 - timer, 107
- On-board aircraft, 36
- One, 114
- One way, 146
- Open and close:
 - chuck, 107
 - close-up space, 72
 - closed trail, 132
 - closing, 104
 - diaphragm, 116
 - door or lid, 103
 - fork lifts, 162*n.*
 - halfnut, 107
 - load, process (camera), 127
 - lock and unlock, 35, 107, 116, 127, 157
 - zones, 52
 - lock, differential, 161
 - margin set, release, 64
 - open here, 98
 - road closed, 146
 - spool release, 63
 - stroller and luggage area (locker), 66
 - switch (off and on), 82
- Operation, 61
- Ophthalmology, 118
- Opposition, 54
- Optics, *see* Physics, 128
- Orally, 113
- Orange, 234
- Orbitals, 68
- Orchard, 44, 95
- Order of, 58
- Ore deposits, 97
- Origin, 89
- Orthopedics, 118
- Oscillating motion, 105, 106
- Oscilloscope, 72
- Ounce, 114
- Out (*see* In and out)
- Outlets, 48–49
- Oven, 102
 - [*See also* Range (Stove)]
- Overtaken vehicle, 142
- Oxidizing agent, 99
- Oxygen, 36
- Paging system devices, 49
- Pagoda, 95
- Panorama, 52
- Paper industry, 105
- Paragraph, 58
- Parcel post, 70
- Park, 158
 - boundary, 92, 95
- Parked, 142
- Parking, 147, 148
 - restriction, 150
 - space limits, 150
 - structure, 34
- Passing, no, 145, 146, 153
- Passive, 89

Path, 92
 Pathology, 118
 Patterns, 65
 dressmaking (instructions), 100
 stitch, 101
 Paved area, 51
 Pawn shop, 65, 66
 Peace, 53
 Pedestrian, 142*n.*, 147
 access, 52
 compulsory way for, 147
 crossing, 144, 147
 crosswalk, 150
 density, 52
 keep left, 145
 may cross, wait, 148
 Pediatrics, 117
 Pelvis, 74
 Per, 58
 Per cent, 58
 Perforation, 110
 Perishable materials, 99
 Permission, 27
 Peso, 58, 85
 Pesticides (*see* Poisons, 41)
 Petrol (*see* Gas)
 Pharmacy, 65
 Phase, 61
 Photographic materials, 99
 Photography, 126–127
 motion pictures, 116
 Photometer, 114
 Photon, 128
 Photosensitivity, 83
 Physical therapy, 117
 Physician (*see* Doctor)
 Physics, 128–129
 Physiotherapy (*see* Physical therapy, 117)
 Picnic area, 130
 Pier, 94
 Piezoelectric crystal unit, 82
 Pigs, 42
 Pipeline, 93
 Piping, 83–84
 Pivot, 128
 Plan drawing, 50*n.*–51*n.*
 Planets, *see* Astronomy, 54
 Planing cut, 106
 Planned parenthood, 114
 Planning (architectural), 51–53
 Planted area, 51
 Plants:
 agronomy, 39–41
 botany, 56
 forestry, 44
 fossils, 97
 landscaping, 51
 Plastics industry, 104*n.*
 Platinum, 87
 Playback, 63

Playback (*cont.*):
 head, 82
 Playground, 130
 Playing cards, 133*n.*
 Ploughs (*see* Plows, 46)
 Plows, 46
 Plumbing, 49
 mechanical engineering, 83–84
 Plus or minus, 111
 Pluto, 54
 Pneumatic machinery, 83*n.*
 Point, 95
 of reference, 52
 Poisons, 41, 98, 140
 Pole, electric distribution, 49
 Police, 91, 145
 Pool, 132
 Population, 57
 Porter, 37
 Positive charge, 67, 128
 Post (*see* Mail)
 Post office, 70, 93
 Postage stamps (*see* Stamps, mailing, 70)
 Postbox (*see* Mailbox, 70)
 Poultry, 42–43
 Powder, 86
 Power, 63, 159
 generator, emergency, 71
 industries, 105
 take-off, 46, 161
 throttle, 165
 train, 165
 transmission line, 93
 Prayer, 117
 Precipitation, 67, 88
 (*See also* Meteorology, 120)
 Precipitator, electrical, 80
 Pregnancy, 89
 Preparation, 58
 Prescription, 113
 Press room, 70
 Pressure, 81
 air, 157
 blowing unit, 107
 compressed gas, 157
 compression, 116
 controller, 81
 decompression, 116
 gauge, 84
 oil: brake, 158
 engine, 157
 transmission, 158
 radiator, 157
 steam, 107
 steam supply, 83
 suction unit, 107
 vacuum, 107
 vessels (process), *see* Chemical engineering, 80
 Printing:
 industry, 105

- Printing (*cont.*):
 machines, 109-110
 proofreader marks, 72-73
 type composition, 72
- Priority, 145, 146
- Prism, 128
- Private telephone, 49
- Process, 58
 pressure vessels, see Chemical engineering, 80
- Processes (alchemy), 88
- Procreation, 89
- Product, 104
- Progeny, 55
- Programming, 58-59
- Prohibition, 26, 145, 152
 end of, 153
- Projection room, 127
- Projector, 71
 effects, 49
- Proofreader marks, 72-73
- Psychology, 113
- Pub (*see* Bar, 36)
- Public:
 health, 38
 telephone, 49
- Pull, 98, 162
- Pulley, 128
- Pump, 102
 centrifugal, 80, 83
 cooling, 106
 hydraulic, 83
 system, 106
 lubricant, 106
 primer, 158
 reciprocating, 80
 rotary, 83
- Purification, 88
- Purple, 235
- Push, 162, 164
- Quality control, 104
- Quarantine, 44
- Quayside, 144
- Queen, 133
- Quiet, 35, 91
 area, 52
- Rabbit, 42
- Radar, 164-165
- Radiation:
 quantities, 115
 warning, 140
 (*See also* Radioactive; Radioactivity)
- Radiator, pressurized, 157
- Radio, 70-71, 159
 station, 52
 selector, 159
- Radioactive, 115
- Radioactivity, 98
- Radiography, 116
- Radiology, 115
- Radiotherapy, 118
- Railing, 51
- Railroad, 92, 144, 146
 crossing, 149
 station, 37, 92
 traffic, 155-156
 (*See also* Grade crossing; Train)
- Railway (*see* Railroad)
- Rain, 47, 120
- Raise, 157
 (*See also* Up and down)
- Range (scope), 51, 165
- Range (stove), 50
 outlet, 48
 (*See also* Oven)
- Ranger station, 95, 130
- Razor:
 blades, used, 35
 socket, electric, 35
- Reactions, 67
- Reactors, 80
- Read, 61
- Reader, 62
- Ready, 60
- Receive, 61
- Receiver, 71
- Reciprocating pump, 80
- Record, 63
- Record shop, 65
- Recorder, 72
- Recorders, tape, 71
- Recording:
 heads, 82
 machines, 63
- Records, medical, 117
- Recreation, 130-137
- Rectifier, 82
- Recycling, 57
- Red, 234
 Crescent, 113
 Cross, 113
 Lion and Sun, 113
 Star of David, 113
- Reducers, 84
- Reef, 94
- Reel speed, 161
- Reference, point of, 52
- Refilling, 107
- Refuge, wildlife, 95
- Refuse (*see* Trash)
- Regeneration, 44
- Registered, 58
 mail, 70
- Registering, 64, 104
- Registration, 117
- Regulation, stepless, 108
- Relationships, 52
- Release, 124
 ribbon, 64

- Release (*cont.*):
 - spool, 63
 - total, 64
- Relief contours, 94
- Relief shipments, 99
- Religion, 138–139
 - buildings, 95
- Remote control, 63
- Remove, 63
- Rendezvous point, 34
- Rental, car, 37
- Repeat, 62, 124
- Repeater, 72
- Reservation boundary, 92
- Reservations, hotel, 35
- Reserve, 44
- Reservoir, 43, 93
 - hydraulic, 158
- Resistor, 82
- Resonance, 115
 - hybrid structure, 68
- Restaurant, 35
- Restrooms (*see* Toilets)
- Retort, 86
- Return to seat, 36
- Reverse (*see* Forward and reverse)
- Reversible reaction, 67
- Review, 63
- Revolution, 106
- Rewind, 126
 - ribbon, 64
- Rich people, 90
- Ridge, 94
- Riding, no, 140
- Right, 26
- Rinsing, 102
- River bank, 144
- Rivers, 93
- Road:
 - markings (*see* Street markings, 148–150)
 - service, 148
 - traffic signs, 143–150
 - work ahead, 144
- Roads, 92
- Rocks, 50, 94, 97
 - falling, 144
- Rockshaft, 161
- Roll, do not, 98
- Rollers, 109
- Room service, 35
- Rooms, 35, 53
- Rotary pump, 83
- Rotate, 74, 157
- Rotation, 106, 113, 128
 - about the bond, 67
- Rotisserie, 102
- Route marker, 147
- Routes, explorer, 95
- Rowing, 135
- RPM (engine speed), 157
- Rubbish (*see* Trash)
- Ruins, 95
- Runways, 151
- Safe deposit boxes, 34
- Safety, 140–142
 - water, 131
- Sailing, 135
- Sal alkali, 87
- Salt, 87
- Salt peter, 87
- Sand, 50, 87, 94, 97, 120
 - dunes, 94, 96
- Saturn, 54
- Sauna, 35
- Scale (diatonic), 123
- Scattering, 128
- School, 95
 - patrol ahead, 144
- Screener, 80
- Scrub, 95
- Scruple, 114
- Scuba diving, 131
- Sealing, 104
- Seaport, 94
- Search, 61
 - tape, 108
- Seasons, *see* Astrology, 89
- Seat belts, fasten, 36
- Seats, 46, 52
- Section, 56, 58
 - drawings, 50*n.*–51*n.*
- Sectioning, 48
- Select, 61
- Semaphore, 75–79
- Separation, 88
- Separator, 47, 59, 80
- Sequence, 61
- Sericulture, 104
- Service, road, 148
- Services, 65–66
 - veterinary, 113
- Set-up, 108
- Settlements, 92–93
- Sewing machines, 65, 101
- Sex, *see* Biology, 55–56
 - (*See also* Male and female)
- Shapes, three-dimensional, 163–165
- Sharp, 140
- Shear pin, 161
 - construction, 108
- Shearing, 104
- Shed, 43
- Sheep, 42
- Shelter, fallout, 140
- Shingles, 51
- Shinto, 139
- Ship, 36
- Shooting, 136
 - range, 132

Shopping center, 65
 Shops, 65-66
 food and drink, 35-36
 pre-neon, 38
 Shoreline, 94
 Shorter than, 55
 Shoulder, 74
 soft, 144
 Shower, 34-35, 49, 130
 Shrub, 51, 56
 Sichi, 66
 Siding, 51
 Signal, 64
 traffic, 144, 148
 translator, 71
 Signs:
 electrical, 48
 road traffic, 143-150
 Sikhism, 139
 Silk, 104
 worm, 42
 Silver, 87, 105, 236
 Sine, 113
 Siren, 49
 Sitting, no, 140
 Size, 70
 Skating, ice, 133, 137
 Skidding, 142
 Skiing, 132, 137
 Skillet, 102
 Skip, 61
 Sky, *see* Meteorology, 121
 Slate, 50, 97
 Slippery, 140
 Slot machine (*see* Vending machine, 36)
 Slow (*see* Speed)
 Sluice, 105
 Small (*see* Measurement)
 Smaller than, 111
 Smog, 162
 Smoke, visibility reduced by, 120
 Smokey the Bear, 130, 137
 Smoking, 36, 130, 140
 Snack bar, 35, 65
 Snow, 120, 148
 Snowmobiles, 132
 Soap, 87
 Soft shoulder, 144
 Soil, 97
 Solar system, *see* Astronomy, 54
 Somersault, 74
 Sort, 59
 Sound system, 49
 Source:
 alternating current, 81
 light, 128
 Southern hemisphere, 56
 Spark:
 advance, 158
 gap current, 115

Spark (*cont.*):
 gap regulation, 115
 Sparky the Fire Dog, 130
 Speaker (loudspeaker), 82
 Specimen verified, 55
 Spectrophotometer, 114
 Speech, 118
 Speed:
 change, 106
 compulsory minimum, 146
 control, 63
 engine (in RPM), 157
 fast and slow, 27, 157
 fast forward, backward, movement, 63, 103
 ground, 160
 jog traverse, 106
 lane for slow traffic, 146
 limit, 145, 156
 monitor, 109
 motion, 116
 quick!, 90
 rapid traverse, 106
 reduce, 155
 reel, 161
 slow: down, 152
 moving vehicle, 140
 wind, 121, 153
 Spin, 128
 Spindle, 106
 Spirits, 86
 Spirits (liquor), 65
 Splicing, 104
 Sports, 131-133
 golf course, 95
 Olympic, 134-137
 Spotlights, 49
 Spray:
 dryer, 80
 steam, 107
 water, 107
 Sprayer, 47
 Spring (coil), 128
 Spring (season), 89
 Spring (water), 93
 cold, 130
 mineral, 131
 Sprinkler, 47
 Stabilizer, 162
 Stable, 131
 Stack range, 109
 Stacking limit, 98
 Staff register system devices, 49
 Stairs, 34
 Stamps, mailing, 70
 Standing, no, 140
 Star, 54, 133
 of David, 113, 139
 Start (*see* On and off)
 Starter, 158, 159

State boundary, 92
 Static eliminator, 110
 Stationery, 65
 Steam, 107
 power, 105
 pressure, 107
 spray, 107
 Steering, manual, 108
 Stenciled sign, 48
 Stencils, 64
 Sterilization, 119
 Sterilizers, 41, 114
 Stewardess call, 36
 Stone, 50
 Stop (*see* On and off)
 Storage tanks, 80
 Stores (*see* Shops)
 Storm warnings, 153
 Storms, 120
 Stove [*see* Oven; Range (stove)]
 Streams, 93
 Street car, 37
 tramway stop, 147
 trolley stop, 91
 Street markings, 148–150
 Strobe, 110
 Stroller area, 66
 Structure, three-dimensional, 68
 Structures, farm, 43–44
 Studio, 70
 Sublimation, 88
 Substances, common, 69
 Substitute, 60
 Suction unit, 107
 Sulphur, 87, 105
 Sum, 112
 Summer, 89
 Sun, 54, 126, 133
 Sunshine, 47
 Sundries, 65
 Surgery, 119
 Suspended load overhead, 140
 Swamp:
 marshes, 95
 plant, 56
 Swastika, 127
 Sweets (*see* Candy, 110)
 Swimming, 135
 Swine, 42
 Switch, 82
 ignition, 158
 light, 35, 159
 main, 107
 Switchboard, 70
 Synagogue, 95
 System, 61

Table:
 adjustment, 114

Table (*cont.*):
 tilt, 116
 vibrating, 110
 Tailoring, 100
 Tanks, 80, 95
 Taoism, 139
 Tape, 108
 control, 108
 magnetic, 59
 punched, 59
 recorders, 71
 tear, 104
 Tarot cards, 133
 Tavern (*see* Bar, 36)
 Taxi, 37
 Tea, 39
 Teeth, *see* Medicine, 114
 Telecommunications, 93
 Telegrams, 70
 Telegraph, 93
 Telephone, 64, 70, 153
 emergency, 132
 free, 91
 international, 70
 line, 93
 private, 49
 public, 49
 Television, 66, 70–71
 camera, 70
 tube (*see* Tube, cathode ray, 82)
 TV station, 52
 Temperature, 27, 81, 157, 160
 controller, 81
 cool, 114
 coolant, 157
 fluid, 107
 cooling pump, 106
 heat, 103, 114,
 apply, 67
 floor, 159
 protect from, 98
 sealing, 104
 stove, 102
 transfer equipment, *see* Chemical
 engineering, 80
 heater, 82, 158
 heating control, 35
 hot and cold, 27
 water supply, 83
 iron, 101
 keep frozen, 98
 oil, transmission, 158
 protect from heat, cold, 98
 refrigeration of cadavers, 118
 stove, 102
 thermometer, 84
 thermostat, 48, 72
 warm front, cold front, 121
 water, 157
 weather fronts, 121

Tension, 107
 control, 110
 Terminals, 36–38
 Terminuses (*see* Terminals, 36–38)
 Terra cotta, 50
 Terrazzo, 50
 Terskelion, 127
 Textile industry, 104
 Theater, 131
 Therapy, occupational, physical, 117
 Therefore, 111
 Thermoforming, 104
 Thermometer, 84
 Thermostat, 48, 72
 heating control, 35
 (*See also* Temperature)
 Threading, 106
 Three-dimensional shapes, 163–165
 Three-dimensional structure, 68
 Throttℓé, hand, 158, 164
 Thunderstorm, 120
 Tickets, 37
 Tighten, 107, 157
 Tile, 50
 Timber, 45
 Time, 27, 103, 157
 after, 150
 annual, 56
 before, 150
 biennial, 56
 clock, 48, 49
 lubrication, 109, 160
 no parking on odd, even dates, 147
 parking, 148
 past hour, 120
 perennial, 56
 perishable materials, 99
 Timer, 107
 Tin, 87, 105
 Tire chains required, 148
 To, 58
 Tobacco, 39, 65
 Toilets, 34
 accessible bathrooms, 52
 aft, 36
 occupied, 36
 water closet, 49
 Tolerances, geometric, 85
 Tone, 64
 Tools (*see* Implements, 45–47)
 Tornado, 120
 Torque converter, 161
 Total, 64
 Touch, do not, 140
 Tow, 158
 Tower, 51
 Towing, 142
 Town, 92
 Township boundary, 92
 Tracer, 106
 Track, 60, 92
 Tractor, 46, 142
 Traffic, 143–156
 accidents, 142
 air, 150–152
 cone, 48
 light, 48
 marine, 152–155
 rail, 155–156
 road, 143–150
 running (engine hours), 157
 signals, 144, 148
 timer, 107
 watches, 66
 Trailer:
 no entry, 145
 sites, 130, 148
 Trails, 130–131
 bicycle, 131, 147
 Train, 37, 51, 91
 coming, 148
 (*See also* Railroad)
 Tramp signs (*see* Hobo signs, 90–91)
 Tramway, 131
 stop, 147
 (*See also* Street car, 37)
 Transfer, 114
 Transformer, 49, 61, 71, 82
 Transistor, 82
 Transition, 128
 Translator, signal, 71
 Transmission, 158
 oil, 158
 filter, pressure, temperature, 158
 Transmitter, 71
 Transpose, 72
 Trash, 35, 117
 Travel, 34–38
 Traverse, 106
 Treatment, 113
 Trees, 51, 56, 95
 forestry, 44–45
 vegetation, 95
 Triquetra, 138
 Trolly stop, 91
 (*See also* Street car, 37)
 Trot (*see* Jog, 106)
 Trough, drinking, 43
 Truck, 142
 crossing, 144
 Tube:
 cathode ray (TV), 82
 current, 115
 vacuum, 82
 Tumble, do not, 98
 Tungsten, 105
 Tuning, 64, 164
 Tunnel, 92, 144
 Turbine, 83
 Turkeys, 42–43

Turn, 124
 signal, 157
 Turning, 106
 Turntable, record, 71
 Twins, 55
 Two, 114
 Type composition, 72
 Typewriters, 64

 Unclamp, 107
 Underpass, 51, 147
 Union, 111
 threaded, 84
 Units, computers, 61-62
 Universality, the path of, 138
 University, 95
 Unlock (*see* Open and close)
 Unwrapped, 114
 Up and down, 26, 157
 above, 150
 eye level, 51
 anticline, syncline, 96
 ascending, descending node, 54
 ascent, descent, 144
 basket lift, 161
 below, 150
 eye level, 51
 bow (music), 125
 climb:
 in holding pattern, 151
 and maintain, 150
 climbing plant, 56
 contours, 94
 cotton picking unit lift, 161
 descend:
 in holding pattern, 151
 and maintain, 150
 distal, 113
 drifting snow, 120
 elevate, 127
 elevator, 34
 escalator, 34
 fault, 96
 fork lifts, 161*n.*-162*n.*
 gas expelled, 67
 hanging plant, 56
 hill, 51
 hoist control (raise, lower), 161
 loader boom (raise, lower), 161
 move upwards, downwards, 152
 northern, southern hemispheres,
 56
 plate rollers, 109
 platform height, 161
 power lift, 46
 precipitation, 67
 proximal, 113
 rockshaft (raise, lower), 161
 stairs, 34
 table descent, return, 109

Up and down (*cont.*):
 this way up, 98
 underpass, 51, 147
 valley, 51
 vertical:
 feed, 106
 motion, 116
 weather fronts, 121
 windows, 160
 Upender, 161
 Uranium, 105
 Uranus, 54
 Urban area, 92
 Urinal, 49
 Urine, 87, 113
 with dung and water, 41
 Use, 51
 Utility outlet, 130

 Vaccination, 113
 Vacuum, 107
 paper feeder, 109
 tube, 82
 Valley, 51
 Valves, 81, 84
 safety, 161
 Van, 142
 Vane, air, 107
 Vasectomy, 114
 Vector, 128
 product, 111*n.*
 Vegetables, 40
 Vegetation, 95
 (*See also* Forestry)
 Vehicle controls, 157-162
 three-dimensional shapes, 164-
 165
 Vehicle ferry, 131
 Vehicles:
 animal drawn, 145
 slow moving, 140
 work, 140
 Vending machine, 36
 Ventilation control, 35
 (*See also* Air, conditioning; Fan)
 Ventilator, 43
 Venus, 54
 Verified specimen, 55
 Vertebrates, 97
 Vertical:
 bed, 96
 circulation, 52
 feed, 106
 motion, 116
 tabulation, 60
 Vessels, process pressure, *see* Chemical
 engineering, 80
 Veterinary services, 113
 Vibrating table, 110

View point, 130
 Village, 92
 Vinegar, 87
 Vineyard, 95
 Visibility (*see* Sky coverage, 121)
 reduced by smoke, 120
 Visitors, 117
 Vista, 52
 Vitriol, 88
 Volcano, 96
 Voltmeter, 128
 Volume, 63, 70
 blackening, 116
 brightness, 116
 contents in liters, 98
 contrast, 116
 empty, 26, 158
 flow controller, 81
 forte, fortissimo, 124
 full, 26, 158
 level, 107
 gas flow, 80
 heavy. . .light, 157
 level, 157
 controller, 81
 lighten, darken, 127
 loudspeaker, 70
 mass, 128
 moon quarters, 54
 noisy, quiet, 52
 piano, pianissimo, 124
 pound, 58
 sky coverage (clouds), 121
 water level, 102
 weight, 103, 108, 157
 gross, net, 98
 (*See also* Measurement)

 Waist, 74
 Waiting room, 37
 Wall light outlet, 49
 Warmer, 102
 Warning, 26
 biohazard, 140
 line, 149
 radiation, 140
 storm, 153
 (*See also* Beware; Caution; Danger)
 Washing:
 facility, 130
 machines, 102-103
 Washroom, 34
 Waste (*see* Trash)
 Watchman system devices, 49
 Water, 57, 86, 157
 Aquarius, 54, 89
 cistern, 43, 50
 closet, 49
 (*See also* Toilets)

Water (*cont.*):
 cooled condenser, 83
 cooler, 80
 don't pollute, 147
 drinking, 36, 90, 153
 fountain, 36, 50
 ductor, 109
 on farm lands, 43
 foot pedal for, 35
 fresh, 93, 95, 96
 fountain, 109
 heater, 50
 hydrographic features, 93-94
 hydrotherapy, 118
 landscaping, 51
 level, 102
 life-giving source, 139
 pipes, 83-84
 plant, 56
 polo, 135
 power, 105
 required, 141
 salt (marine), 94-96
 sports, 131
 spray, 107
 temperature, 157
 way, larger, crossing and entering, 153
 well, 96
 Wave, 128
 Wax, 88
 WC (*see* Toilets)
 Weather (*see* Meteorology)
 Weekdays, *see* Astrology, 89
 Weight (*see* Volume)
 Weir, 153
 Welding, 84
 Well, 43
 gas, 96
 oil, 96
 water, 96
 Wheels, 45
 Whistle:
 buoy, 154
 post, 156
 White, 237
 Wildlife refuge, 95
 Winch, 161
 Winding (moving air):
 cross, 144
 speed, 121, 153
 Windmill, 43, 95
 Windows, 160
 Windscreen (*see* Windshield, 160)
 Windshield, 160
 Wine, 65
 Winter, 89
 Olympics, 137
 sports, 132-133
 Wireless (*see* Radio)

Wiring:
 architectural, 48-49
 electronic, 81-83
Wisdom, 47
With, 113
Without, 113
Woman, 89
 (*See also* Male and female)
Women's toilet, 34
Women's wear, 66
Wood, 50
Woods, 95
 (*See also* Forestry, 44-45)
Wool, 103
 pure new, 103
Woolens, 103
Word, 60
World, 89, 133
 hemispheres, 56
 old, new, 56
 (*See also* Earth)
Wrapped, 114
Wrapping, 104
Wreck, 94
Wrist, 74

Write, 61

X-ray equipment (*see* Radiology, 115-116)
X-rays, 118

Yellow, 234
Yes, 75, 141
Yield, 146, 149
 sign ahead, 144
Yin-yang, 112, 139
Youth hostel, 148

Zen Buddhism, 138
Zero, 108
Zinc, 87, 105
 oxide, 88
Zip fastener (*see* Zipper, 100)
Zipper, 100
Zodiac:
 astrology, 88-90
 astronomy, 54
Zoology, *see* Biology, 55
Zoom, 126
Zoroastrianism, 139

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