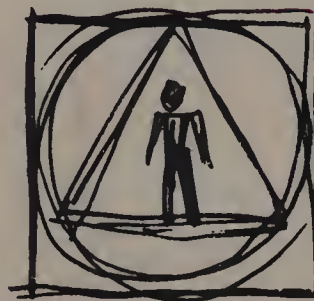


# **HENRY DREYFUSS SYMBOL SOURCEBOOK**



**An Authoritative Guide to  
International Graphic Symbols**

**Foreword by R. Buckminster Fuller**

# SYMBOL SOURCEBOOK

## An Authoritative Guide to International Graphic Symbols

With this unparalleled reference, a 20-year dream comes to fruition for famed industrial designer Henry Dreyfuss—the man whose pioneering efforts led the way in making the machines and artifacts of 20th century technology both aesthetic and functional.

Early in his work, Henry Dreyfuss recognized the importance of symbols in communicating more quickly and effectively; for these many years he and his staff have been collecting and codifying graphic symbols as they are used in all walks of life throughout the world. And now, at the summit of his career, he has compiled them in this "dictionary" of symbols.

Never before has the monumental task of assembling universally used graphic symbols within the pages of one convenient reference been attempted. Characteristically, Henry Dreyfuss has designed the Sourcebook to be as practical and easy to use as possible by arranging the symbol information within these ingeniously devised sections:

- **Table of Contents**—contains translations of each of the Sourcebook's section titles and discipline areas into 17 languages in addition to English, making it immediately useful the world over.
- **Basic Symbols**—presents a concise and highly selective grouping of symbols common to all disciplines (On-Off, Up-Down, etc.). Provided here is a brief commentary on the "grammar" of symbol use and an explanation of how basic symbols may be combined with others in a "building block" technique to express varied and more complicated meanings.
- **Disciplines**—provides symbols used in accommodations and travel, agriculture, architecture, astronomy, biology, business, chemistry, communications, engineering, folklore, geography, geology, handling of goods, home economics, manufacturing, mathematics, medicine, meteorology, music, photography, physics, recreation, religion, safety, traffic and vehicle controls.
- **Color**—lists the meanings of each of the colors in various worldwide applications and cultures.
- **Graphic Form**—displays symbols from all disciplines grouped according to form (squares, circles, arrows, human figures, etc.) providing a unique way to identify a symbol out of context and giving designers a frame of reference for developing new symbols.
- **Index**—not only gives complete subject listing, but provides a grouping called "Design Categories" which offers an easy way to find most-used symbols.

(continued on back flap)







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*Designing for People*, Simon & Schuster, Inc., 1955; Revised Edition, Grossman Publishers, 1967.

*Measure of Man*, Whitney Library of Design, 1959; Revised Edition, Whitney Library of Design, 1967.

REF 419 D826s

Dreyfuss, Henry, 1904-

San Francisco Public Library

Symbol sourcebook; an  
authoritative guide to  
[1972]

SYMBOL SOURCEBOOK

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Book design and sketches by Henry Dreyfuss.



Paul Clifton headed the entire Data Bank and Sourcebook project with devotion and with constant regard for quality, concept, and detail. His efforts and concern have been boundless and my gratitude is beyond words.

H.D.

#### A PLEA FOR MORE SYMBOLS

*My interest in symbols is a continuing one. I hope that the countless people and organizations who have already contributed information will continue to do so, and that they will be joined by new enthusiasts who are introduced to the importance of symbols through this Sourcebook.*

*One day a central symbol archive surely will be established, in which all symbols used throughout the world will be catalogued and available for reference. Looking toward this goal, we are keeping our Data Bank active and open for further contributions — which indeed will be welcomed. Information may be sent to the author, P.O. Box 70, South Pasadena, California, 91030*





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



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# FOREWORD

by R. Buckminster Fuller

**T**here 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.

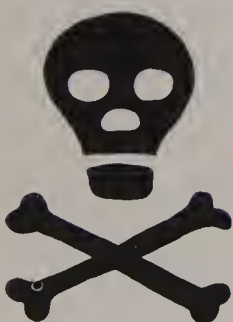
In the great overall evolutionary trending of humanity's gradual learning to produce ever more with ever less, it is implicit that the present discoveries of the electromagnetic behaviors of the brain and its local nerve system controls by mind will eventuate in telepathy's being graduated from society's 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	לשן



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.

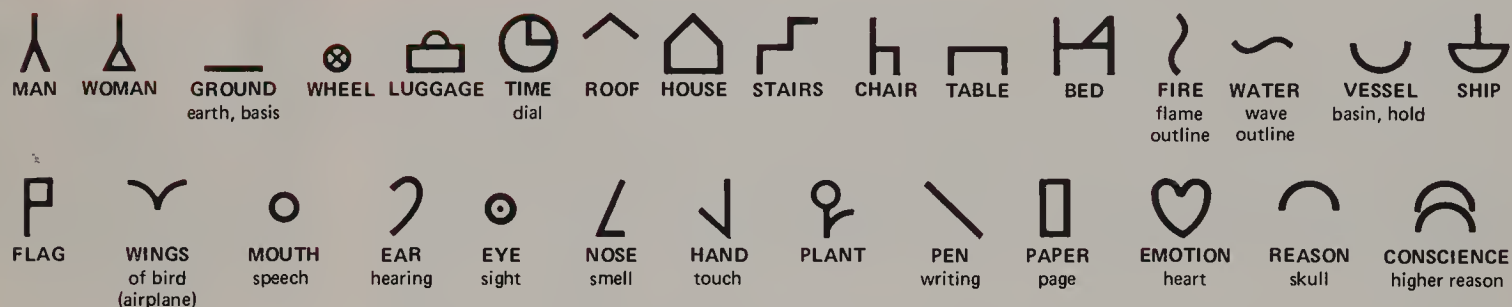
The great Leibnitz dreamed 300 years ago that someone will some day invent a Universal Symbolism, a simple system of pictorial symbols which could be read (like  $1 + 2 = 3$ ) in all languages – without translation. It would also contain a simple symbolic logic and semantics (just as anyone can today 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

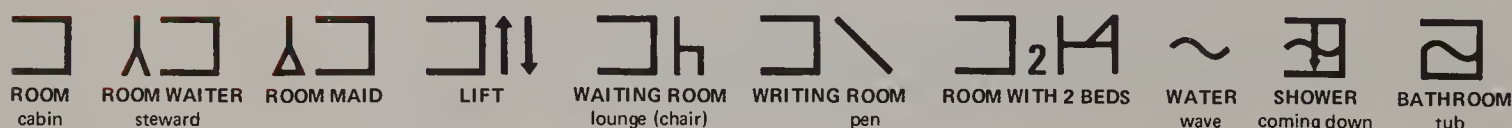


By putting a small Action indicator on top of these symbols the verbs to hear, to see, to write, to feel, to reason, etc. are formed. With this, children learned to write whole sentences within the first hour and were able to read combinations they have never seen before.

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.



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*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:



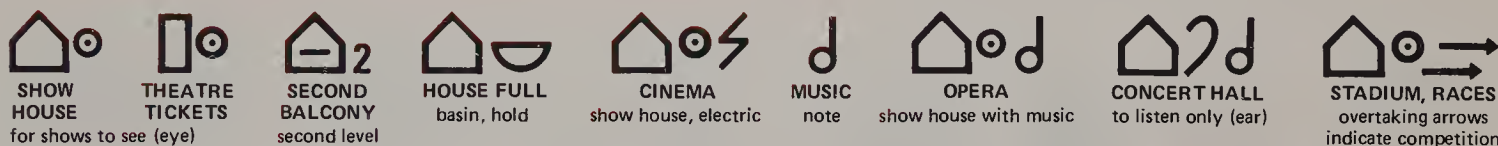
### For railways, buses, airplanes, ships, time tables, etc.



### For motorists:



### For theatres, operas, concert halls, 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.



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.





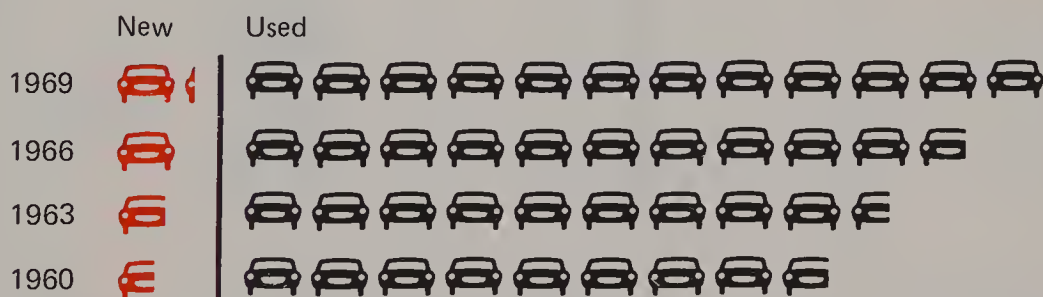
*Through hardship, success, war, economic depression, and eventual recognition all over again, Otto Neurath always had his wife Marie at his side. Today this unassuming lady carries on the work they began together through the Isotype Institute Ltd. We are indebted to her for this presentation. HD*

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.



**U.S. PASSENGER CAR REGISTRATION** ( Each symbol equals 6 million cars )

Otto Neurath firmly believed that the world needed a uniform, international visual system of expression that would work as an auxiliary language in complete accord with each of the world's spoken languages. He was wholeheartedly dedicated to this goal.

Just as ISOTYPE crosses all language barriers, so we, in an effort to continue our work, crossed the borders of many countries. We worked in Austria, Russia, Germany, Holland, England, Mexico, the United States, Nigeria; we fled, forced by circumstance or conviction, or traveled by choice, to expose and explain our system and promote its world wide acceptance.     □

# 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.

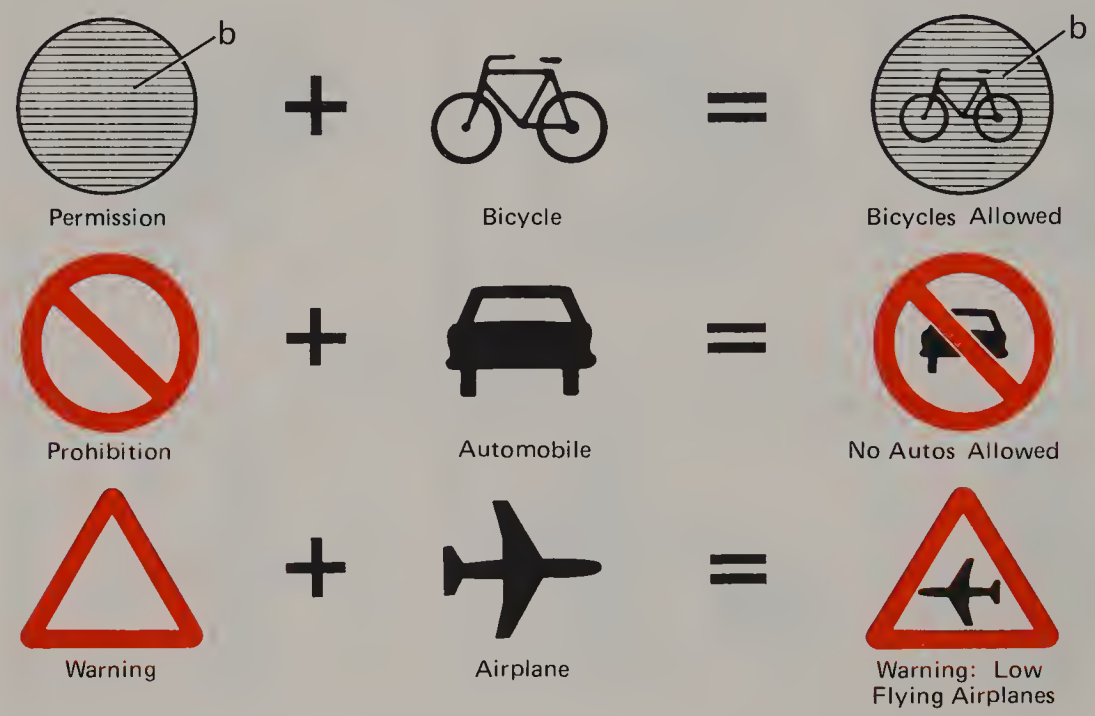
			
MISSION	TIME	DIRECTION	MOTION
			
OUT	FAST	SLOW	
			
T ... COLD	HEAVY ... LIGHT	INCREASE	DECREASE
			
ASUREMENT	LIGHT ... DARK	CONTINUOUSLY VARIABLE	



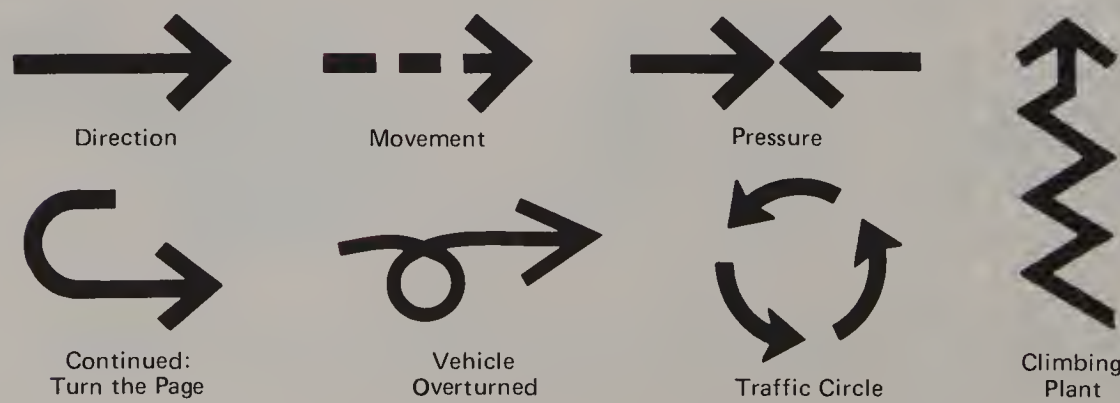
# BASIC SYMBOLS *(continued)*

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.

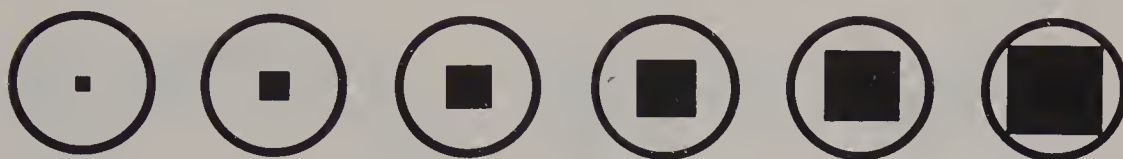
For instance, effective forms, reinforced by color, have been adopted by the United Nations for traffic guidance. Color is used for emphasis and instant recognition — red expressing prohibition or warning, and blue indicating permission. The meaning of the basic form is modified by what is placed within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



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



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:

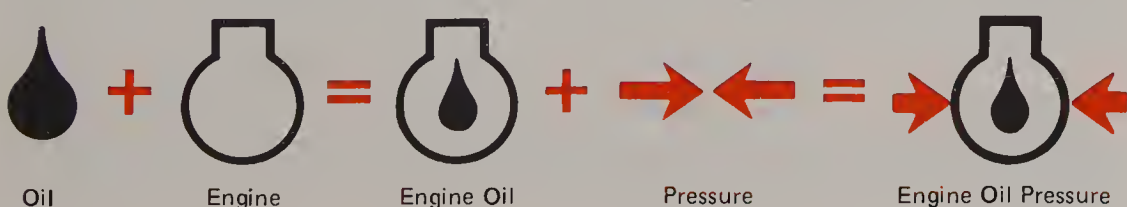


Snowfall (Slight Intermittent to Heavy Continuous)



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:

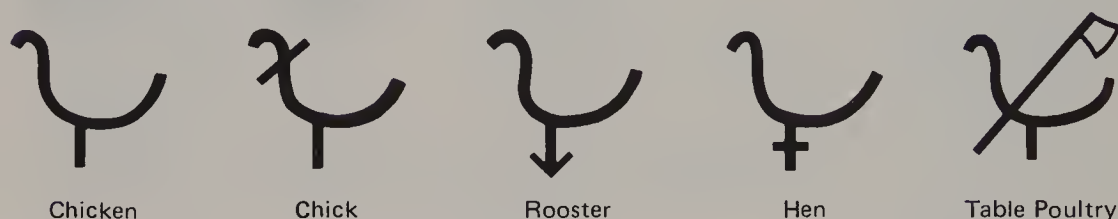


# BASIC SYMBOLS *(continued)*

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:



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## 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.

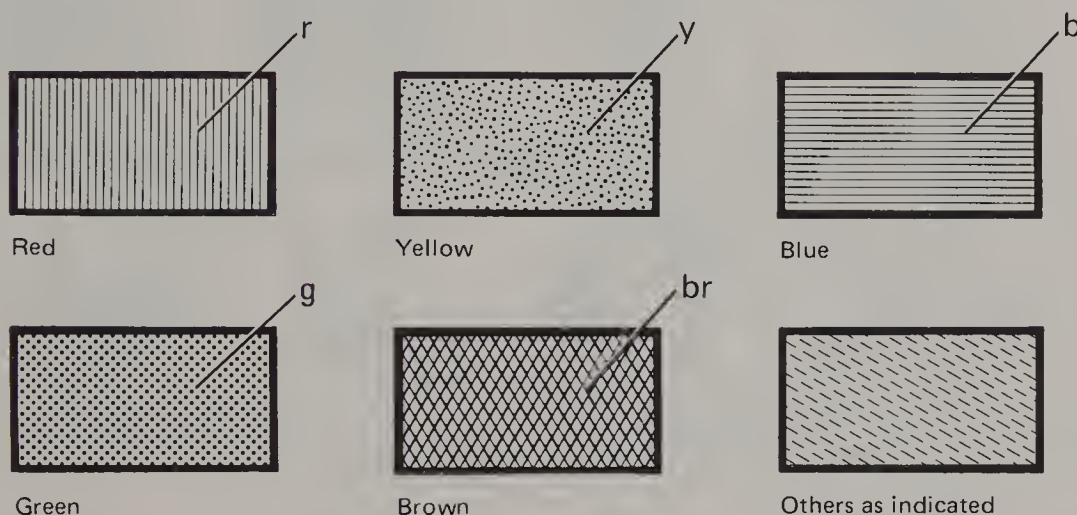
The three-dimensional shapes included in Vehicle Controls are another example of nongraphic directives serving for immediate transmission of information — adjuncts to the written word or symbol.

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	
 OR  OR 			ELEVATOR		
 OR  OR 			 OR 		
INFORMATION			RENDEZVOUS POINT		STROLLERS
		 OR 			
LOST CHILD		NURSERY		CLOAKROOM	MEN'S CLOAKROOM
 OR 					
LOST and FOUND		SAFE DEPOSIT BOXES		DELIVERY ENTRANCE	Facilities
		 OR 		 OR 	
TOILETS		MEN'S TOILET		WOMEN'S TOILET	
					
BATH and SHOWER					







		OR			OR							OR		
BATH								SAUNA BATH		SHOWER				
								OR			220 V ~			
MEN'S SHOWER		WOMEN'S SHOWER		USED RAZOR BLADES		ELECTRIC RAZOR SOCKET							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				
				OR			OR							
Food and Drink		RESTAURANT						SNACK BAR		COFFEE SHOP				



# ACCOMMODATIONS AND TRAVEL *(continued)*

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

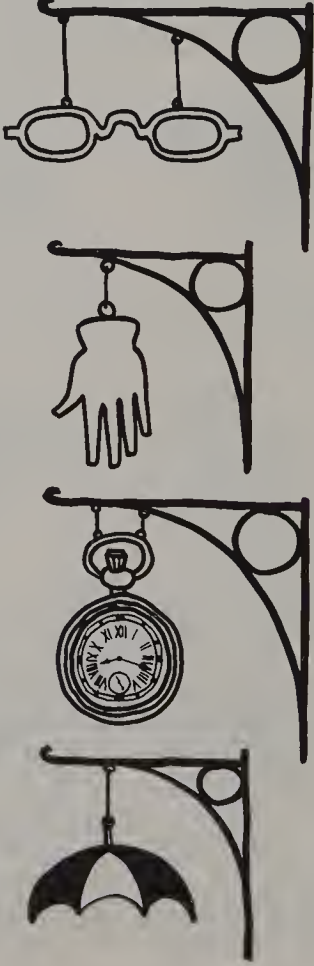
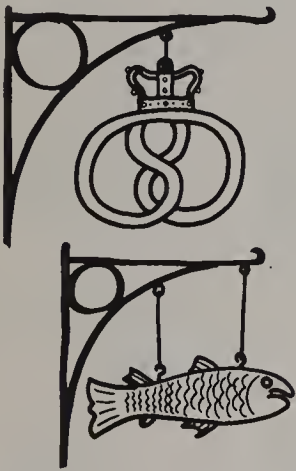
## Terminals

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

 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.






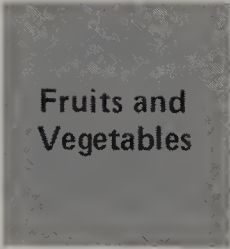


















Besides reminding regular customers of the services and merchandise offered, these indicators also informed tourists not familiar with the language, as well as local illiterates (who abounded before the last century), of what was available within.

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


















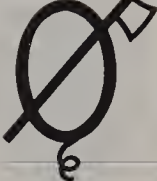




















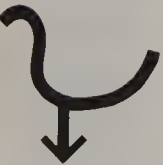
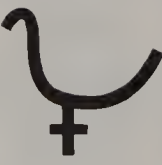

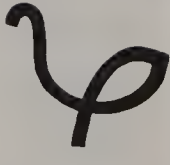
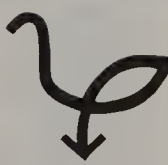
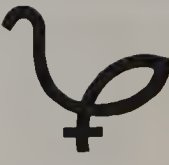
					
MANGEL-WURZEL	CANE	CLOVER	ALFALFA (Lucerne)	SAINFOIN	SERRADELLA
					
WEED	GRASSES		VEGETABLES	TOMATO	POTATO
					
CHITTED POTATOES	JERUSALEM ARTICHOKE	RUTABAGA	TURNIP	LEGUMES	BEAN
					
SOYBEAN	BROAD BEAN	LENTIL	VETCH	LUPINE	PEA
					
PEANUT	STANDARD	HALF STANDARD	BUSH	BUSH, spindle tree	FRUIT
				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

RED CURRANT	BLACK CURRANT	STRAWBERRY	RASPBERRY	BLACKBERRY	
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		

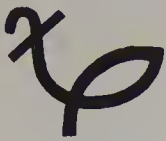





Livestock and Dairy Products

HORSE	STALLION	MARE	GELDING	COLT	FILLY




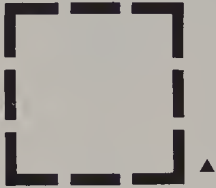








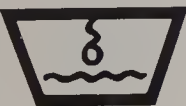






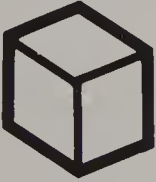
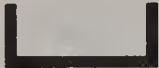









▲ May be combined with symbols indicating usage. Example: indicates Powdered Insecticide, indicates Sterilizer Emulsion.



					
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

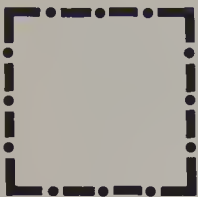

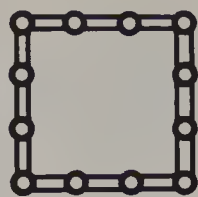
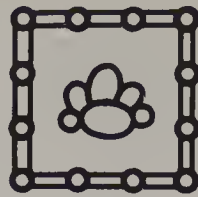
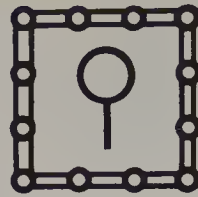




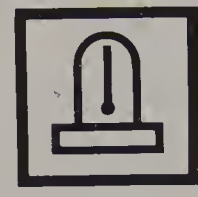


					
TURKEY CHICK	DUCK	DUCKLING	GOOSE	GOSLING	PIGEON


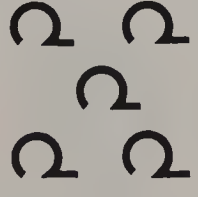






















### Farm Structures and Lands

					
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.





























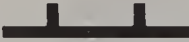

					
ACREAGE	PASTURE	GARDEN	VEGETABLE GARDEN	ORCHARD	FALLOW LAND
					
CELLAR	KITCHEN	QUARANTINE	METEOROLOGICAL STATION		

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





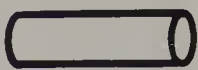
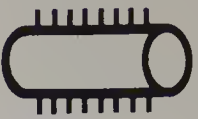














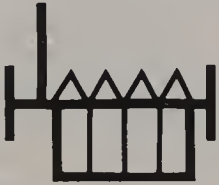

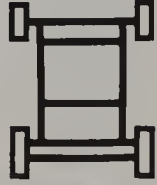

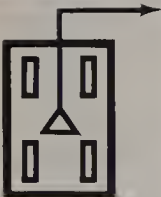
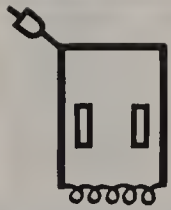
















					
CLEARING in YOUNG STAND	THINNING	TIMBER	FIREWOOD		










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	 SPRINKLER	OR  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

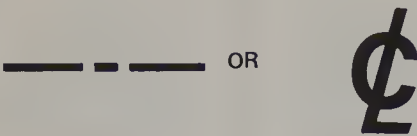






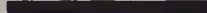
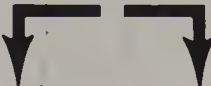















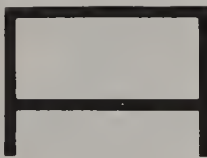













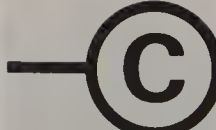



Good Luck



Against Demons





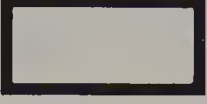

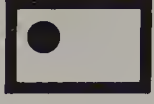
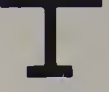
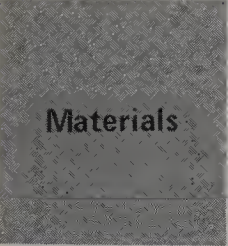


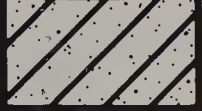


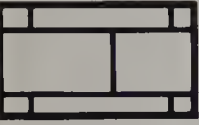


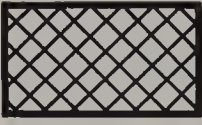
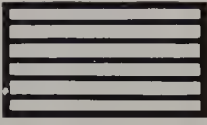











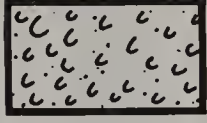






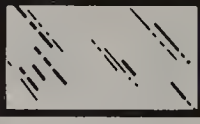
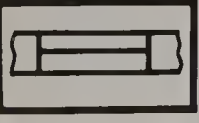
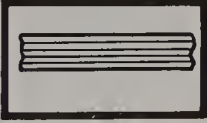




					
CENTER LINE	DIMENSION LINE	SHORT BREAK LINE	LONG BREAK LINE	PHANTOM LINE	
					
EXTENSION LINE	HIDDEN LINE	OUTLINE	CUTTING PLANE	SECTIONING	
					
	SIGN OUTLET ONLY	FLUSH FLOOR SIGN OUTLET	BRACKET LIGHT SIGN OUTLET	SPECIAL SIGN OUTLET, as noted	ELECTRIC SIGN DISPLAY
					
DIRECTION SIGN, Non-illuminated	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: —⊖<sub>G</sub> 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
SYSTEM DEVICES, PAGING	SYSTEM DEVICES, FIRE ALARM		SIREN	SYSTEM DEVICES, STAFF REGISTER	SYSTEM DEVICES, ELECTRIC CLOCK
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
SPOTLIGHT, BIFOCAL	SOFTLIGHT	EFFECTS PROJECTOR	Plumbing	BATH	SHOWER STALL
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).

 WH WATER HEATER	 METER	 R RANGE	 DF DRINKING FOUNTAIN	 WATER CISTERN	 HB HOSE BIBB
 Materials	 EARTH	 ROCK	 NATURAL RUBBLE	 RUBBLE	 NATURAL ASHLAR
 ASHLAR, CAST or NATURAL	 CAST STONE	 MARBLE	 SLATE	 BRICK	 COMMON BRICK
 FACE BRICK	 FIRE BRICK	 BRICK-COTTA	 TERRA COTTA	 TERRA COTTA, UNGLAZED	 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.















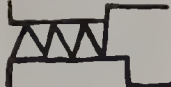







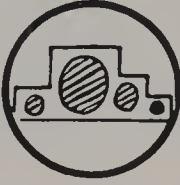





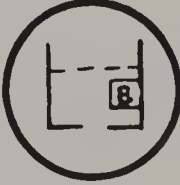
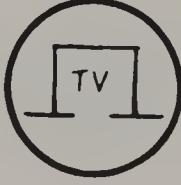






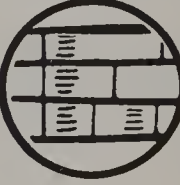


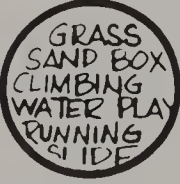
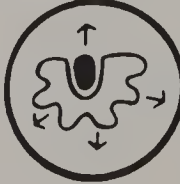
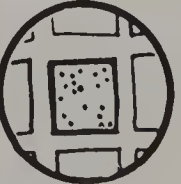
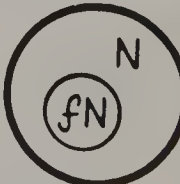
CORK (Linoleum)	METAL	METAL, Large Scale	SHINGLES; SIDING		

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 OVER- LOOKING LIFE	 CHILD-CARE POSITION	 CHILD-CARE CONTENTS	 EXPANSION	 PEDESTRIAN DENSITY	 SIZE BASED on POPULATION

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

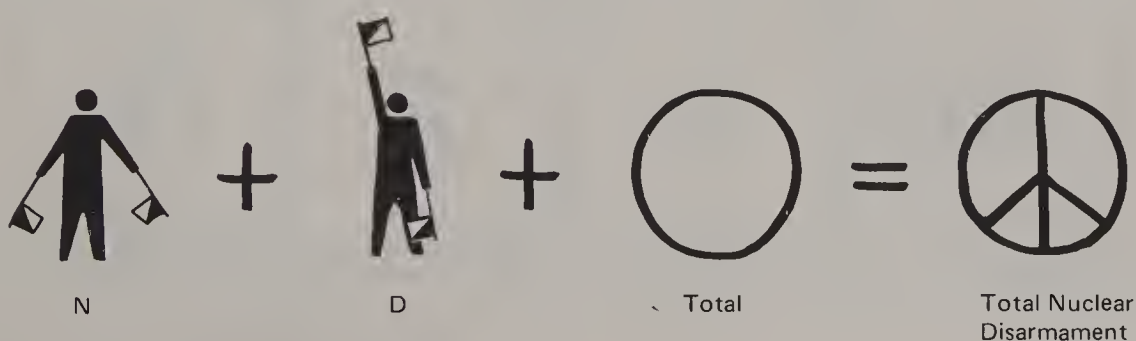
POOLS of LIGHT	ARENA ENCLOSURE	ALL SERVICES OFF ARENA	ARENA THOROUGHFARE	DISH-SHAPED ARENA	ARENA DIAMETER
ARENA STORAGE	BUILDING Stepped Back from Arena	COMMUNITY WALL	TOWN MEETING	COMMUNITY TERRITORY	COMMUNITY PRO-JECTS TWO-SIDED
OFFICE FLEXIBILITY	MEETING ROOMS CLUSTERED	SEATS OUTSIDE MEETING ROOMS	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.





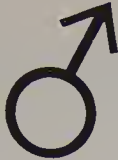
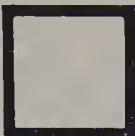




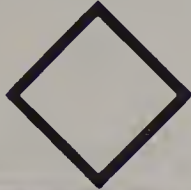
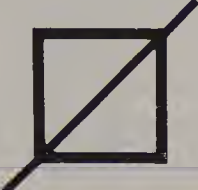













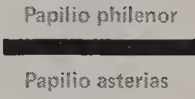
















# ASTRONOMY

					
SUN	NEW MOON	FIRST QUARTER MOON	FULL MOON	LAST QUARTER MOON	MERCURY
					
VENUS	EARTH; GLOBULAR CLUSTER	MARS	JUPITER	SATURN	URÁNUS
					
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.,  $\alpha$  Lyrae designates brightest star in constellation Lyra).



BIOLOGY

 OR  MALE	 OR  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: F<sub>2</sub> 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.

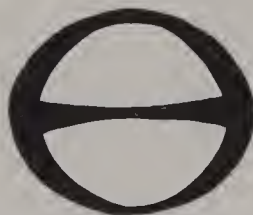
<b>CYS</b> (C)	CYSTEINE	<b>ASP</b> (D)	ASPARTIC ACID	<b>pH</b>	NEGATIVE LOGARITHM OF HYDROGEN ION CONCENTRATION
<b>HIS</b> (H)	HISTIDINE	<b>ASN</b> (N)	ASPARAGINE	<b>~ P</b>	HIGH ENERGY PHOSPHATE BOND
<b>ILE</b> (I)	ISOLEUCINE	<b>GLU</b> (E)	GLUTAMIC ACID	<b><math>\bar{v}</math></b>	PARTIAL SPECIFIC VOLUME
<b>MET</b> (M)	METHIONINE	<b>GLN</b> (Q)	GLUTAMINE	<b><math>\bar{M}_n</math></b>	NUMBER AVERAGE MOLECULAR WEIGHT
<b>SER</b> (S)	SERINE	<b>LYS</b> (K)	LYSINE	<b><math>\bar{M}_w</math></b>	WEIGHT AVERAGE MOLECULAR WEIGHT
<b>VAL</b> (V)	VALINE	<b>X</b> (X)	UNDETERMINED or ATYPICAL AMINO ACID	<b><math>\bar{M}_z</math></b>	z AVERAGE MOLECULAR WEIGHT
<b>ALA</b> (A)	ALANINE	<b>RNA</b>	RIBONUCLEIC ACID	<b><math>\gamma</math></b>	ACTIVITY COEFFICIENT
<b>GLY</b> (G)	GLYCINE	<b>DNA</b>	DEOXYRIBONUCLEIC ACID	<b><math>\epsilon</math></b>	MOLAR EXTINCTION COEFFICIENT
<b>LEU</b> (L)	LEUCINE	<b><math>S^{\circ}_{20,w}</math></b>	SEDIMENTATION COEFFICIENT	<b><math>\frac{\Gamma}{2}</math></b>	IONIC STRENGTH
<b>PRO</b> (P)	PROLINE	<b><math>[\alpha]_{\lambda}</math></b>	SPECIFIC ROTATION		
<b>THR</b> (T)	THREONINE	<b><math>[\eta]</math></b>	INTRINSIC VISCOSITY		
<b>PHE</b> (F)	PHENYLALANINE	<b><math>\Pi</math></b>	OSMOTIC PRESSURE		
<b>ARG</b> (R)	ARGININE				
<b>TYR</b> (Y)	TYROSINE				
<b>TRP</b> (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












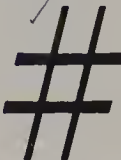
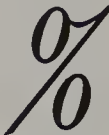

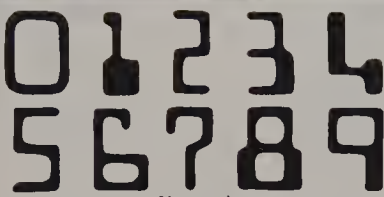




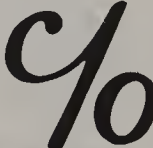







Water



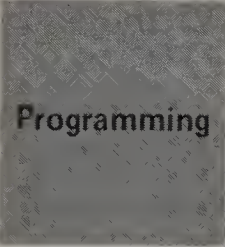
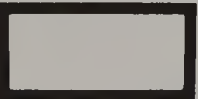


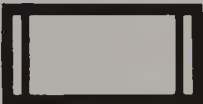
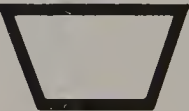
Land








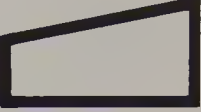



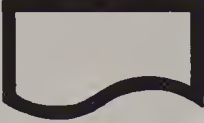
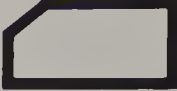

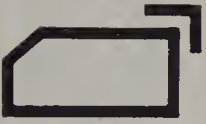









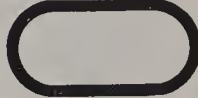

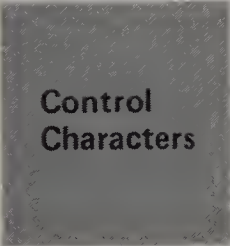

















BUSINESS

 DOLLAR; ESCUDO; PESO; CRUZEIRO	 PHILIPPINE PESO	 CENT(S)	 COLON	 POUND STERLING	 YEN
 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










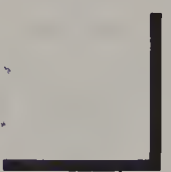

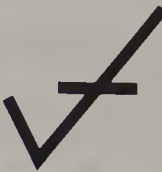





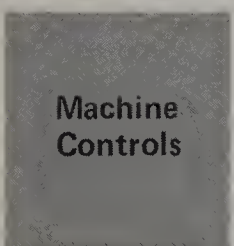

















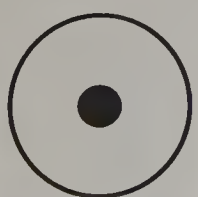
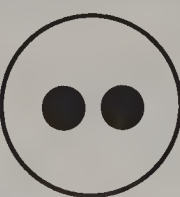




Computers

 Programming	 PROCESS	 DECISION	 PREPARATION	 PREDEFINED PROCESS	 MANUAL OPERATION
---	--	---	---	--	--

† ISO Recommendation


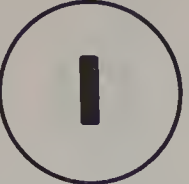










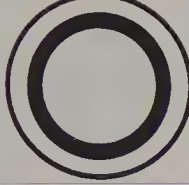



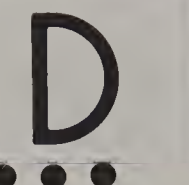








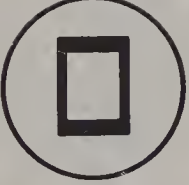

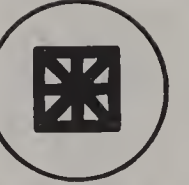


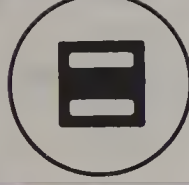

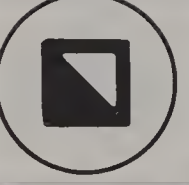









					
AUXILIARY OPERATION	MERGE	EXTRACT	COLLATE	SORT	MANUAL INPUT
					
INPUT/OUTPUT	ONLINE STORAGE	OFFLINE STORAGE	DOCUMENT	PUNCHED CARD	DECK of CARDS
					
FILE of CARDS	PUNCHED TAPE	MAGNETIC TAPE	MAGNETIC DRUM	MAGNETIC DISK	CORE MEMORY
					
DISPLAY	COMMUNICATION LINK	ENTRANCE CONNECTOR	EXIT CONNECTOR	TERMINAL; 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




































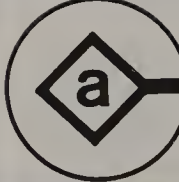






¶ ISO Recommendation

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

Note: The enclosing figure (usually a circle) is not part of the symbol but is used to contain the symbol and indicate scale.



					
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













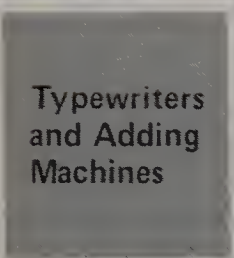

















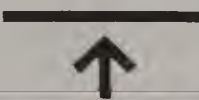


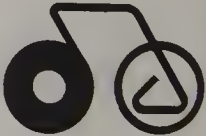






					
READER	EXTERNAL CONDITION	ACCUMULATOR (Impulse-storing)	AUXILIARY; Impulse-storing	EXTERNAL CHANNEL	INTERNAL CHANNEL
					
END of OPERATION	UNIT	TEN	HUNDRED	THOUSAND	TÉN THOUSAND
					
FRAGMENT of the MAGNETIC TAPE	FRAGMENT for FRAGMENT	BEGINNING of a TAPE FRAGMENT	BEGINNING of a SEQUENCE	REPEAT	CLEAR
					
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

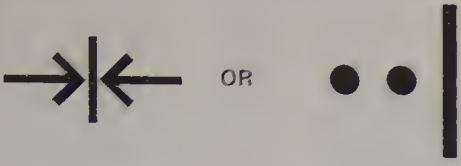


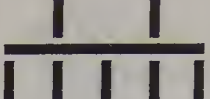

ISO Recommendation



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



	 OR 				
CONFERENCE	LOUDSPEAKER		TUNING	TREBLE TONE	BASS TONE
		 OR 			
TELEPHONE	BUZZER	SIGNAL		SINGLE INSULATION	DOUBLE INSULATION
				 OR 	
	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
	 OR 				
TAB CLEAR	TAB SET		TYPE	NO PRINT	RIBBON FEED
				 OR 	
RIBBON RELEASE	RIBBON REWIND	MARGIN SET	MARGIN RESET	MARGIN RELEASE	

 <p>REPOSITION INDICATOR</p>	 <p>SPACE EXPAND</p>	 <p>EXPAND</p>	 <p>HALF SPACE</p>	 <p>LINE SPACING KEY</p>
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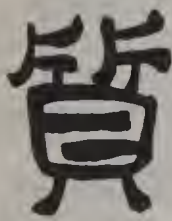
# Shops and Services

 OR 		 OR  OR  OR 			
BARBER	BEAUTY PARLOR	PHARMACY			
 OR 			 OR 		
MARKET; GROCERY	WINE and LIQUOR	TOBACCO	BOOK STALL		
 OR 					
PAWN SHOP	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

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



REACTION  
DIRECTION



REVERSIBLE  
REACTION



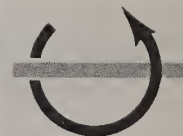
GAS EXPELLED



PRECIPITATION



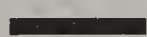
APPLY HEAT



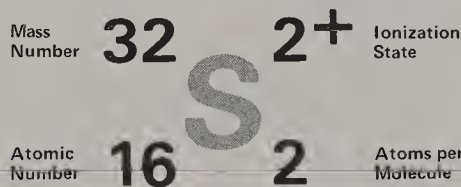
ROTATION about  
the BOND



POSITIVE CHARGE



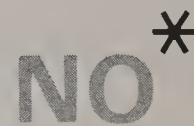
NEGATIVE CHARGE



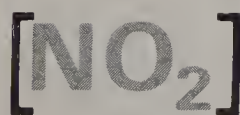
NUCLIDE



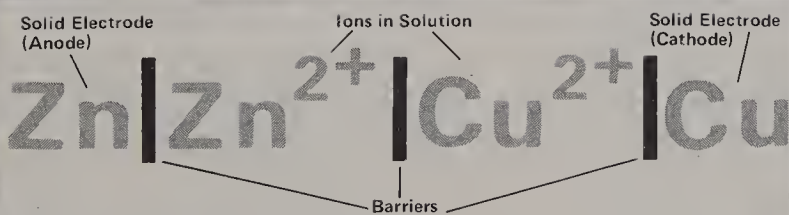
INDICATION of  
DIVALENCY



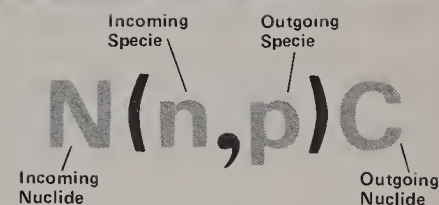
ELECTRONIC  
EXCITED STATE



MOLAR  
CONCENTRATION



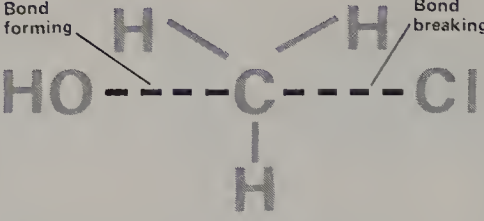
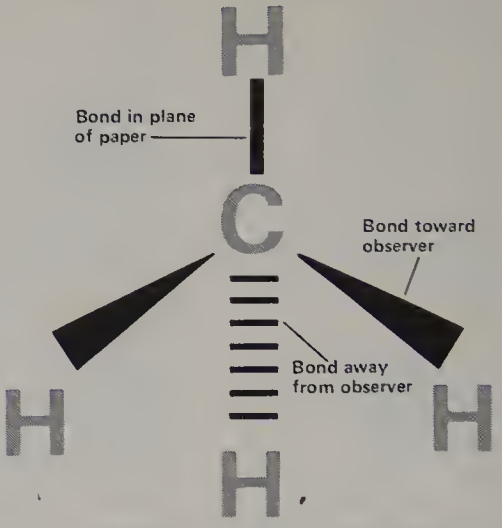

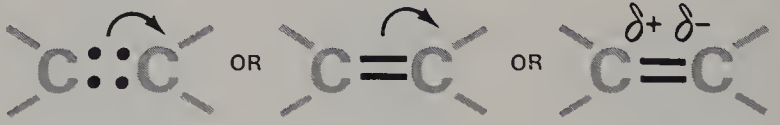
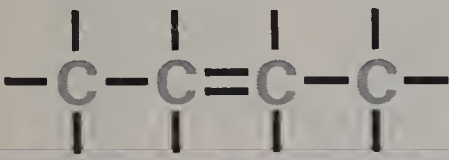
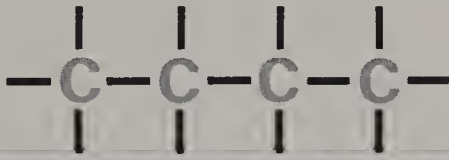
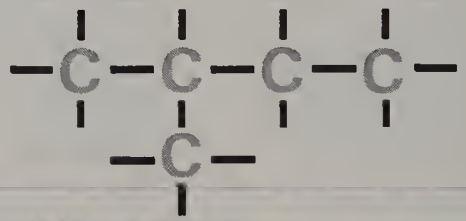
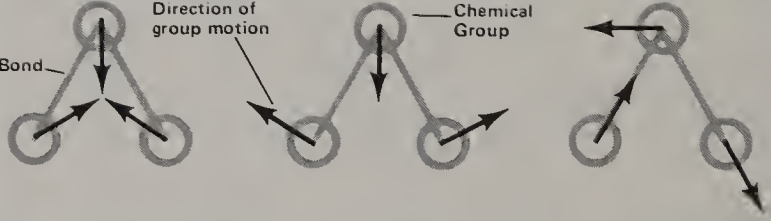





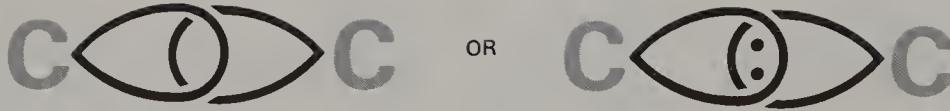
ELECTROMOTIVE CELL (Battery)



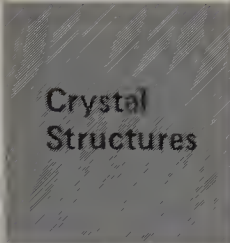






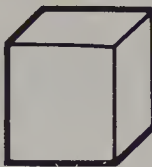

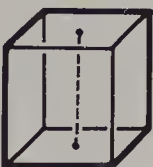



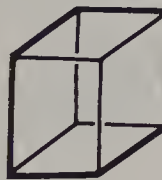








NUCLEAR REACTION

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

# CHEMISTRY *(continued)*

$\text{Na}_2[\text{SO}_4]$  COMPLEX GROUP	  TRANSITION STATE	  THREE DIMENSIONAL STRUCTURE (Methane)	
$\text{C}-\text{C}$  SINGLE BOND	$\text{C}=\text{C}$  DOUBLE BOND	$\text{C}\equiv\text{C}$  TRIPLE BOND	$\text{HO}\cdot$  FREE RADICAL
  RESONANCE HYBRID STRUCTURE (Benzene)		  PARTIALLY POLARIZED COVALENT BOND	
  UNSATURATED CARBON CHAIN	  UNBRANCHED SATURATED CARBON CHAIN	  BRANCHED SATURATED CARBON CHAIN	
$[\text{CO}(\text{NH}_3)_6]_2(\text{SO}_4)_3$  POLYATOMIC GROUP BONDING		  MOLECULAR VIBRATIONS	
  ATOMIC s ORBITAL	  ATOMIC p ORBITAL	  ATOMIC d ORBITAL	  TWO ATOMIC ORBITALS forming SINGLE MOLECULAR $\sigma$ ORBITAL
  HYBRID s-p ATOMIC ORBITAL	  MOLECULAR ORBITAL		







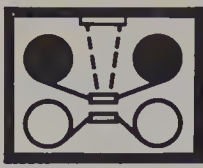



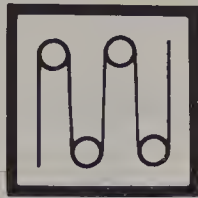
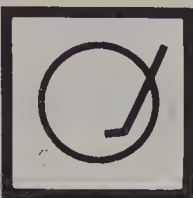
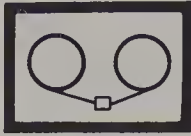
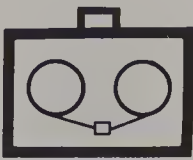
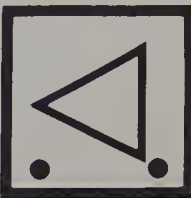

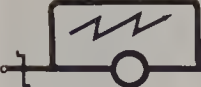

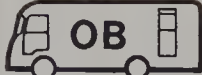
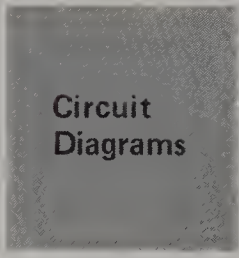




















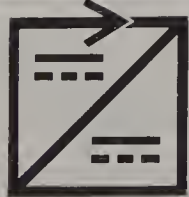




	 TRICLINIC	 OR  HEXAGONAL	 OR  RHOMBOHEDRAL
 DIAMOND	 Simple OR  Body-centered OR  End-centered OR  Face-centered OR  Body-centered ORTHORHOMBIC		
 Simple OR  Body-centered TETRAGONAL		 Simple OR  Side-centered MONOCLINIC	
 Simple OR  Body-centered OR  Face-centered OR  Body-centered OR  Face-centered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



# COMMUNICATIONS






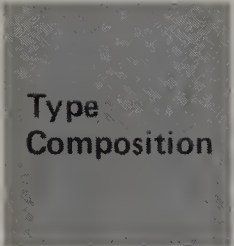


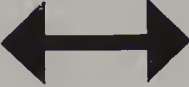












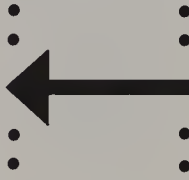

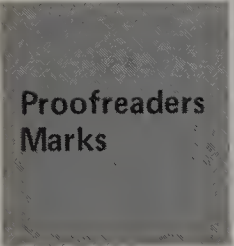

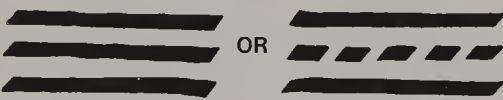
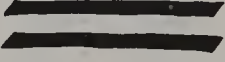



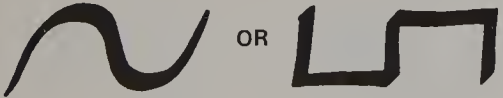
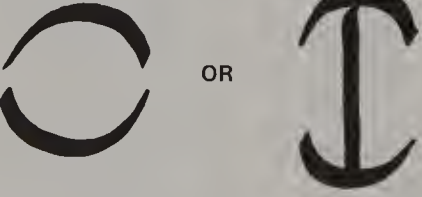
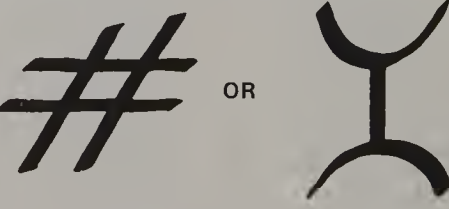
 MAILING STAMPS	 OR  OR  MAILBOX; POST OFFICE			 MAIL SENDING	 MAIL RECEIVING
 MONEY ORDERS	 REGISTERED MAIL	 INSURED MAIL	 PARCEL POST	 INTERNATIONAL PARCEL POST	 GENERAL DELIVERY
 WRAPPING of SMALL PACKAGES	 WRAPPING of LARGE PACKAGES	 OR  OR  TELEGRAMS			 SWITCHBOARD and SOUND
 TELEPHONE	 TELEPHONE, local	 TELEPHONE, long distance (International)	 Television and Radio		 PRESS ROOM
 GROUP ROOM		 OR  TELEVISION CAMERA		 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.

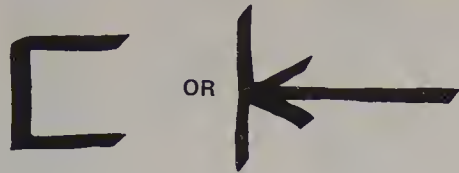
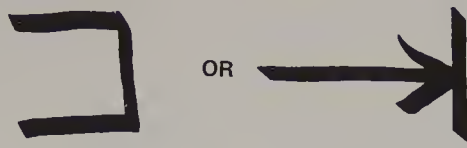
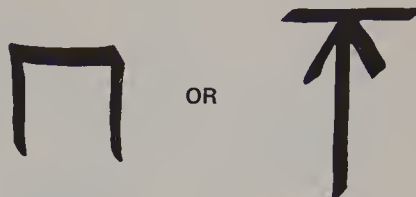
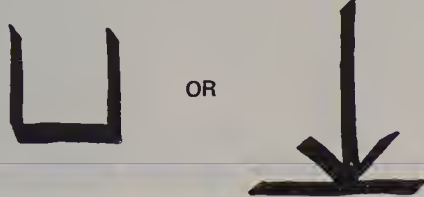
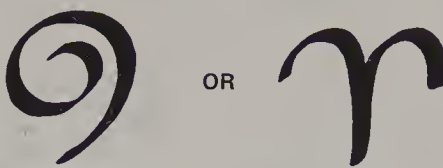





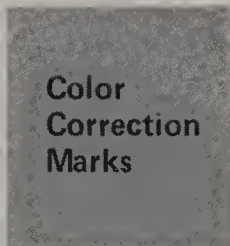
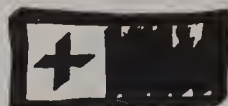
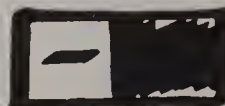
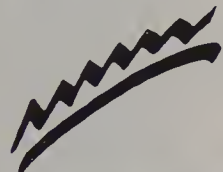


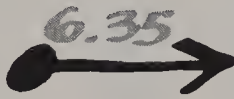
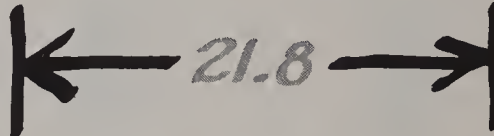
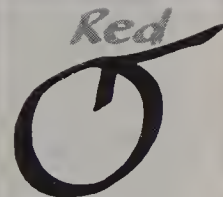
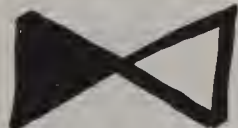


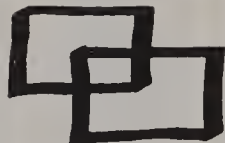

					
PROJECTOR	VIDEO TAPE RECORDER	WINDING and SPlicing TABLE	EDITING TABLE	RECORDER for PERFORATED TAPE	FILM SCANNER
					
TELECINE for DIAPOSITIVES	PROCESSING MACHINE	RECORD TURNTABLE	TAPE RECORDER	PORTABLE TAPE RECORDER	MIXER
					
CONTROL DESK	EMERGENCY POWER GENERATOR	CAR	OUTSIDE BROADCASTING UNIT	Circuit Diagrams	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	OR	SIGNAL TRANSLATOR (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		
 TRANSPOSE		 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:   



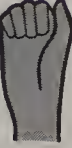

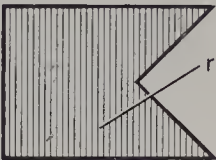



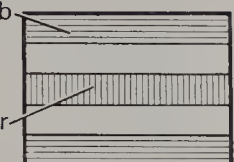



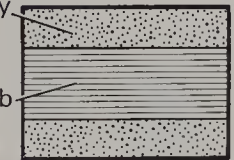

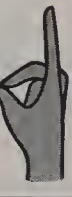





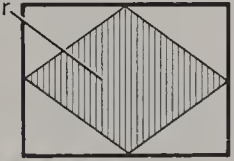





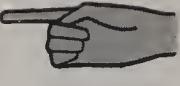

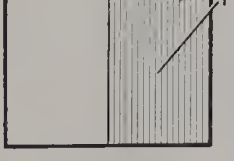



Other helpful symbols might show you that the article is continued on the next page.   

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

<div><p>Diagram illustrating movement directions relative to a central rectangle:</p><p>LEFT      Forward      Forward      RIGHT</p><p>Forward Diagonal      Forward Diagonal</p><p>Side      Side</p><p>Backward Diagonal      Backward Diagonal</p><p>Backward      Backward</p><p>DIRECTION</p></div>				<div><p>LEVEL</p><p>High      Middle      Low</p></div>	
<div><p>LEFT SHOULDER</p></div>		<div><p>RIGHT SHOULDER</p></div>			
<div><p>LEFT ELBOW</p></div>	<div><p>RIGHT ELBOW</p></div>	<div><p>LEFT WRIST</p></div>	<div><p>RIGHT WRIST</p></div>	<div><p>LEFT HAND</p></div>	<div><p>RIGHT HAND</p></div>
<div><p>LEFT FINGERS</p></div>	<div><p>RIGHT FINGERS</p></div>	<div><p>HIP</p></div>	<div><p>KNEE</p></div>	<div><p>ANKLE</p></div>	<div><p>FOOT</p></div>
<div><p>TOES</p></div>	<div><p>HEAD</p></div>	<div><p>CHEST</p></div>	<div><p>WAIST</p></div>	<div><p>PELVIS</p></div>	<div><p>WHOLE TORSO</p></div>
<div><p>TURN, Rotate Clockwise</p></div>	<div><p>TURN, Rotate Counterclockwise</p></div>	<div><p>SOMERSAULT FORWARD</p></div>	<div><p>SOMERSAULT BACKWARD</p></div>	<div><p>CARTWHEEL to LEFT</p></div>	<div><p>CARTWHEEL to RIGHT</p></div>
<div><p>CIRCULAR PATH LEFT</p></div>	<div><p>CIRCULAR PATH RIGHT</p></div>	<div><p>PRESS</p></div>	<div><p>PUNCH</p></div>	<div><p>WRING</p></div>	<div><p>SLASH</p></div>

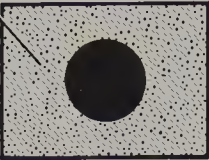



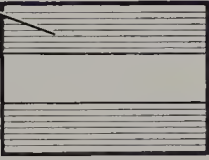


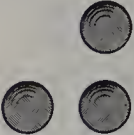
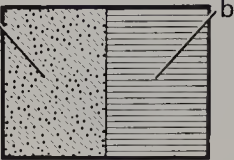


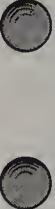
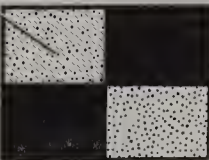






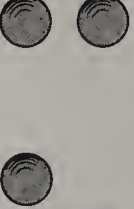
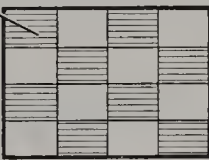



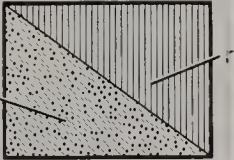



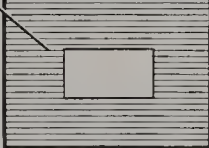



Note: "Alphabet of Basic Symbols," copyright 1954 by Rudolf Laban, reproduced by permission of Dance Notation Bureau, Inc.

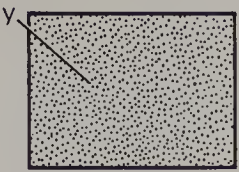



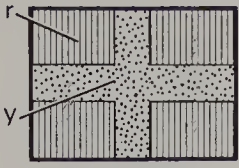


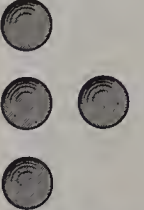
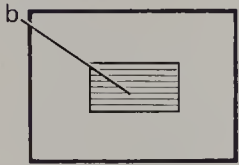



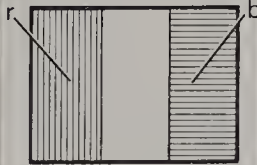






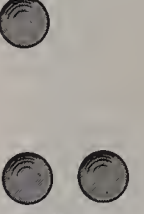
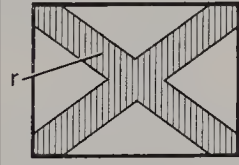

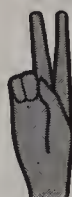

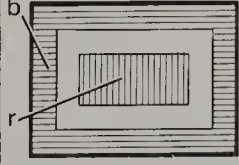



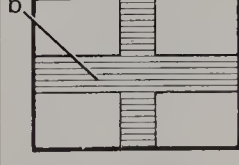

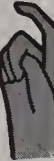



	Morse Code <sup>▲</sup>	International Flags	Semaphore	Manual (Deaf)	Braille
A	• —	 Speed trial			
B	— • • •	 Explosives			
C	— • — •	 Yes			
D	— • •	 Keep clear			
E	•	 Altering course to starboard			
F	• • — •	 Disabled			
G	— — •	 Want a pilot			
H	• • • •	 Pilot on board			

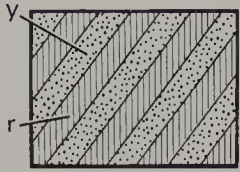




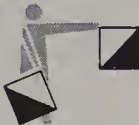
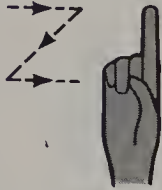
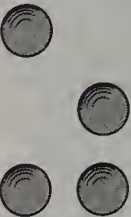
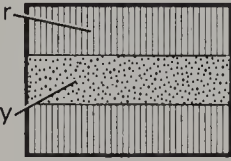


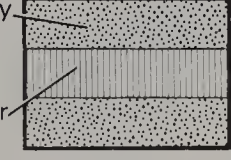


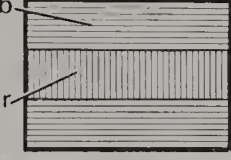


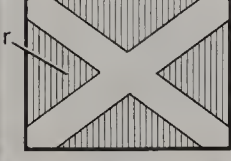


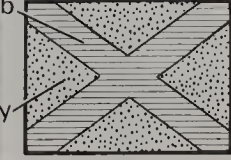


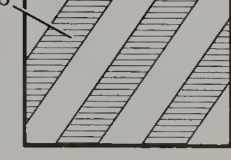
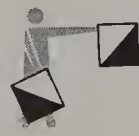

▲ Morse code may also be transmitted by “blinker” lights or by flags.





	Morse Code	International Flags	Semaphore	Manual (Deaf)	Braille
I	..	 Altering 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)			




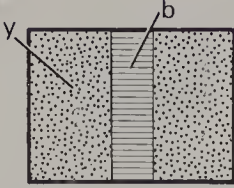

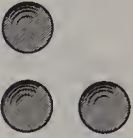



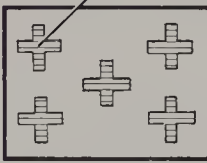

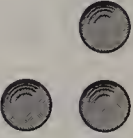
	Morse Code	International Flags	Semaphore	Manual (Deaf)	Braille
Q	--- · -	 Request pratique			
R	· - ·	 Way is off my ship			
S	···	 Going full speed astern			
T	- ·	 Do not pass ahead of me			
U	·· -	 Standing into danger			
V	··· -	 Require assistance			
W	· - -	 Require medical assistance			
X	- ·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



	Morse Code	International Flags	Semaphore <sup>▲</sup>	Manual (Deaf)	Braille <sup>▲</sup>
Y	- . - -	 Carrying mails			
Z	- - . .	 Shore stations			
1	. - - - -	 Carrying mails			
2	. . - - -	 Shore stations			
3	. . . - -	 Shore stations			
4	. . . . -	 Shore stations			
5	. . . . .	 Shore stations			
6	- . . . .	 Shore stations			

▲ 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

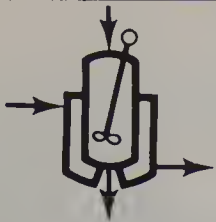









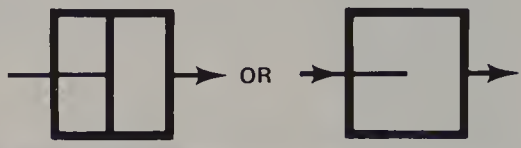






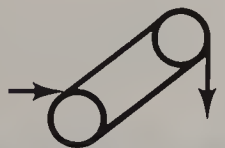
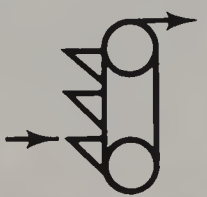



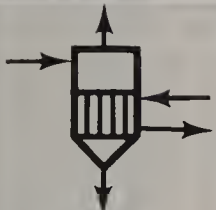
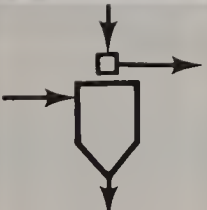
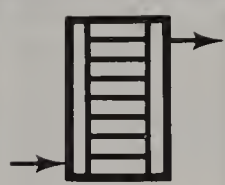
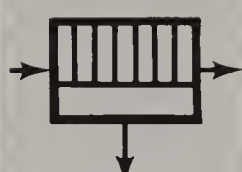




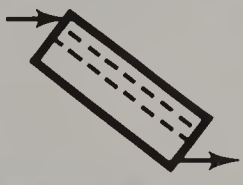



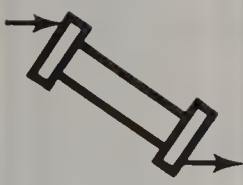
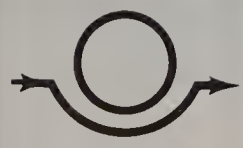




In South Africa, most of the men who work in the mines are illiterate. The miners, therefore, are given instructions and warnings in the form of symbols rather than words.

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.

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


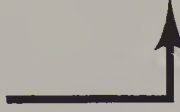
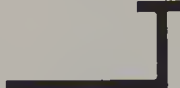



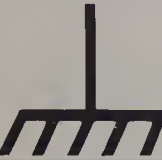

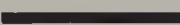

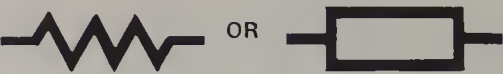






















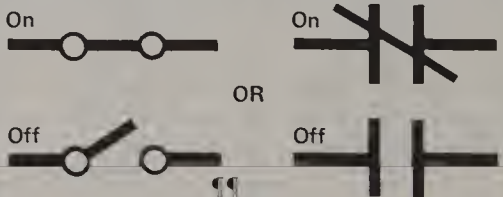






TEMPERATURE	PRESSURE	ALL CONTROL VALVES	PRESSURE CONTROLLER	TEMPERATURE CONTROLLER	FLOW CONTROLLER
LEVEL CONTROLLER	SUMMATION POINT		OPERATIONAL BLOCK		
TAKE-OFF POINT					

# Electrical










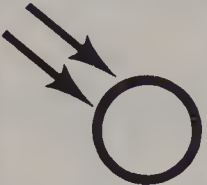



DIRECT CURRENT (DC)	ALTERNATING CURRENT (AC)	AUDIO FREQUENCY AC	SUPERAUDIO FREQUENCY AC	CROSSED CONDUCTORS	JOINED CONDUCTORS
SINGLE-PHASE	2-PHASE 3-WIRE	2-PHASE 4-WIRE	3-PHASE 3-WIRE (Delta)	3-PHASE 3-WIRE (Star)	3-PHASE 4-WIRE (Star)
2 and 3-PHASE TEE CONNECTED	3-PHASE 3-WIRE VEE CONNECTED	6-PHASE;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

¶¶ Draft ISO Recommendation






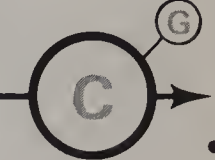
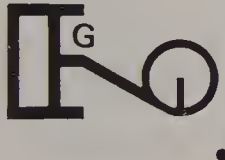




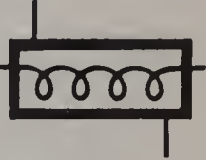

















 PRESET CONTROL	 ADJUSTABLE TAPPING	 PRESET TAPPING	 NON-LINEAR VARIABILITY	 SATURABLE PROPERTIES	 EARTH (Ground)
 CHASSIS of EQUIPMENT	 INSULATED COUPLING	 UNINSULATED COUPLING	 SCREENED CONDUCTOR	 RESISTOR	
 NON-INDUCTIVE RESISTOR (Heater)	 ADJUSTABLE CONTACT RESISTOR	 INDUCTOR	 TRANSFORMER	 VACUUM 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

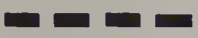
















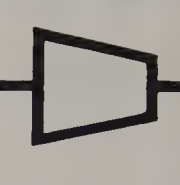










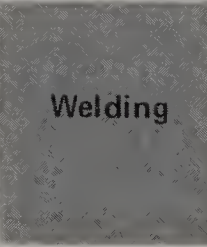

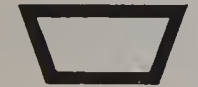
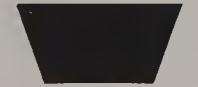










 OR  OR  OR 				Male  Female  OR  Male  Female	
AERIAL (Antenna)				CONNECTOR	
			 OR 		
PERMANENT MAGNET	PHOTO-SENSITIVITY	BELL	BUZZER		



## 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







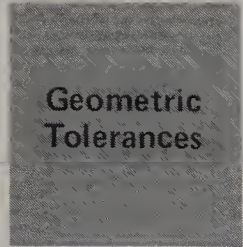
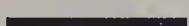















- ▲ Pneumatic machinery is indicated by , hydraulic machinery by .
- G indicates Gas. Different initial may be substituted to indicate other type of machine; e. g. D (diesel), M (motor), T (turbine), E (steam). Exception: (see Engine, Gas) Steam Engine is indicated by symbol without initial.
- ★ C indicates 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	ECCENTRIC 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
					
	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

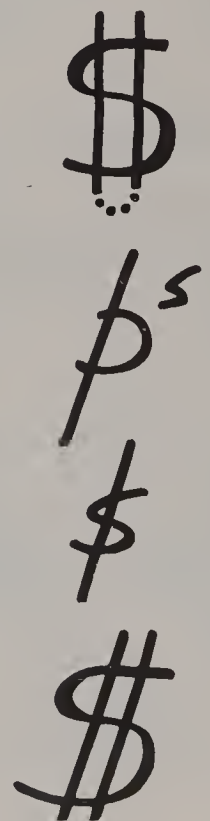
## EASY COME




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.














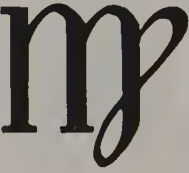
 OR  OR  WATER			 OR  EARTH		 FIRE
 OR  AIR		 OR  HOUR		 DAY	 NIGHT
 MONTH	 OR  OR  OR  OR  CRUCIBLE				
 OR  GLASS		 OR  RETORT		 OR  POWDER	
 OR  SPIRITS (Alcohol)		 Elements		 OR  OR  ANTIMONY	
 OR  OR  OR  ARSENIC				 COBALT	 COPPER
 OR  OR  GOLD				 OR  OR  IRON	

<div></div> OR <div></div> OR <div></div>			<div></div>	<div></div>	<div></div>
<div></div>	<div></div> OR <div></div> OR <div></div>			<div></div> OR <div></div>	
<div></div>	<div>Compounds and Mixtures</div>	<div></div> OR <div></div> OR <div></div> OR <div></div>			
<div></div> OR <div></div>		<div></div> OR <div></div>		<div></div>	<div></div>
<div></div> OR <div></div> OR <div></div> OR <div></div>				<div></div> OR <div></div>	
<div></div> OR <div></div> OR <div></div> OR <div></div>				<div></div>	<div></div>
<div></div> OR <div></div>		<div></div>	<div></div>	<div></div> OR <div></div>	












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



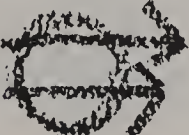





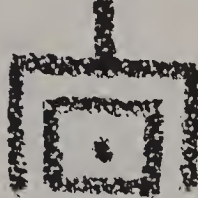



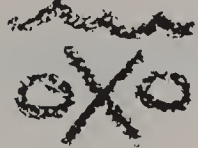
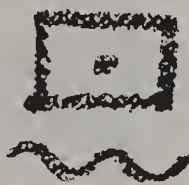


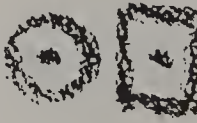
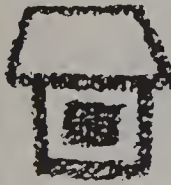
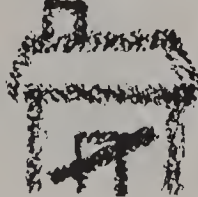
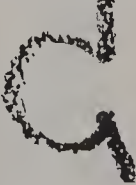

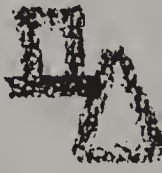
Astrology

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


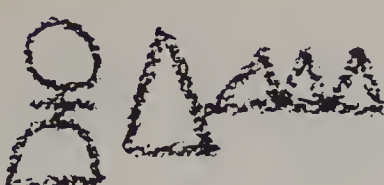
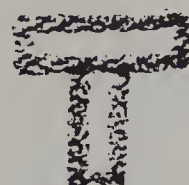



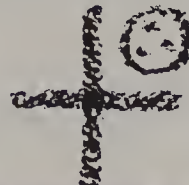






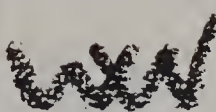
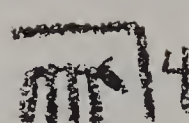
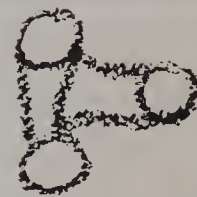
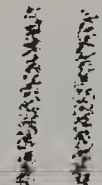

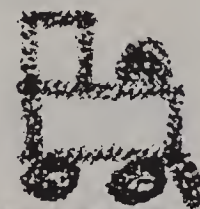

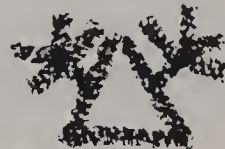


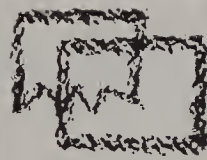




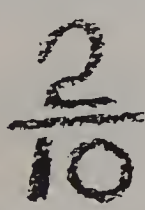



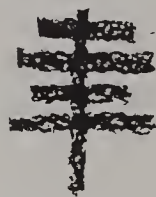
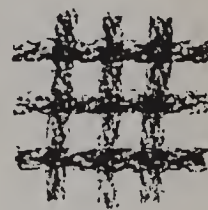
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<div></div> <div>OR</div> <div></div> <div>CAPRICORN</div>	<div></div> <div>OR</div> <div></div> <div>AQUARIUS</div>	<div></div> <div>OR</div> <div></div> <div>PISCES</div>			
<div></div> <div>SPRING</div>	<div></div> <div>SUMMER</div>	<div></div>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

					
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

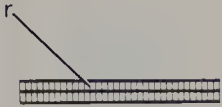

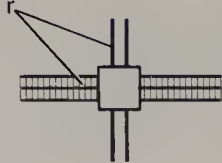
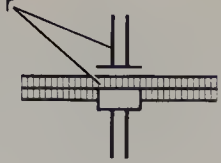
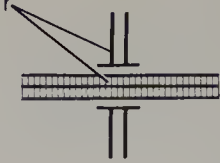
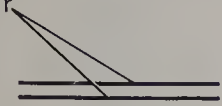


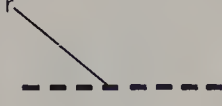
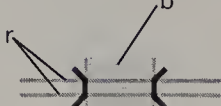
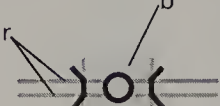
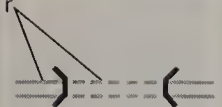




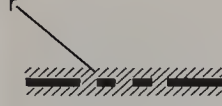
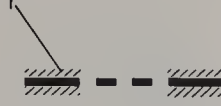




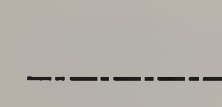
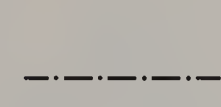
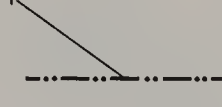


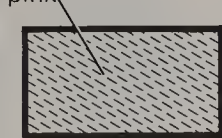

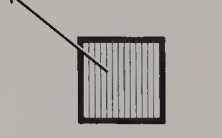
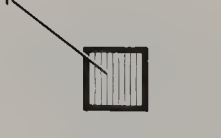

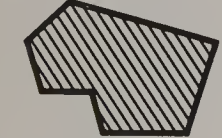





			OR		
NO USE GOING THIS DIRECTION	THIS WAY	HIT THE ROAD! QUICK!		GOOD ROAD to FOLLOW	ROAD SPOILED, full of other hobos
					
DOUBTFUL	HALT	THIS IS THE PLACE	DANGEROUS NEIGHBORHOOD	THIS COMMUNITY indifferent to hobos	NOTHING to be GAINED HERE
					
YOU CAN CAMP HERE	FRESH WATER, SAFE CAMPSITE	DANGEROUS 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


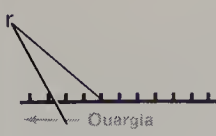
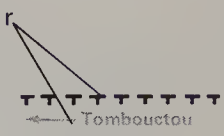








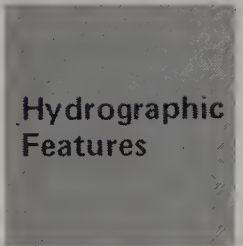

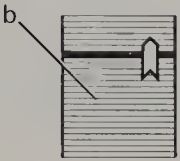
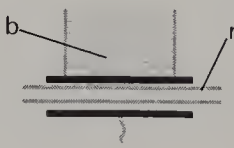
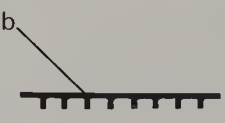



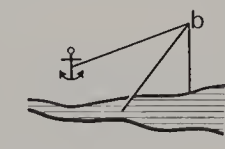
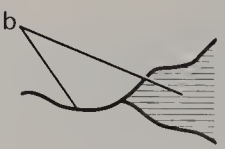
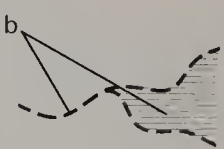





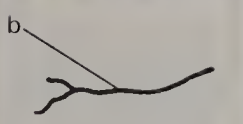


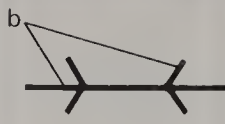
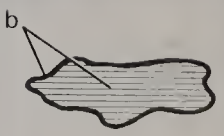
Note: Hobo signs are drawn as they usually appear — in chalk, on a rough wood fence, post or sidewalk.

GEOGRAPHY

<div>Roads and Railroads</div>	 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	
<div>Boundaries</div>	 INTERNATIONAL	 UNDEMARCATED INTERNATIONAL	 UNDEFINED INTERNATIONAL	 PROVINCIAL or STATE	 COUNTY
 TOWNSHIP	 INCORPORATED VILLAGE	 RESERVATION, national or state	 LAND GRANT	 SMALL PARK, CEMETERY	 BOUNDARY BEACON
<div>Settlements</div>	 URBAN AREA	 METROPOLIS	 CITY	 TOWN	 CITY of administra- tive importance
 CITY of no admin- istrative importance	 CAPITAL CITY	 NAMED TOWN within larger urban area	 VILLAGE	 HAMLET	 VILLAGE, permanently inhabited


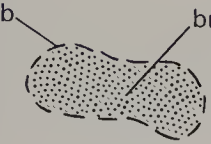
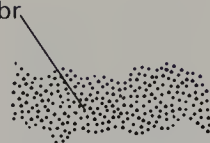






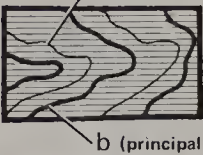

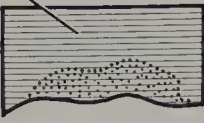



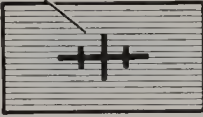



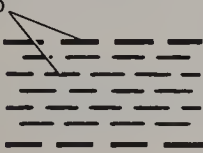
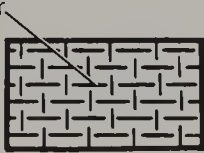

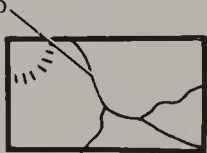
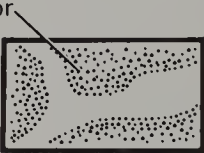
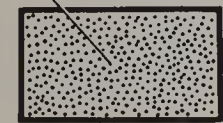
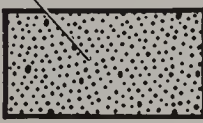
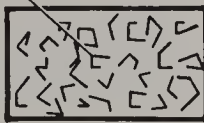

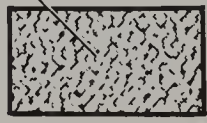

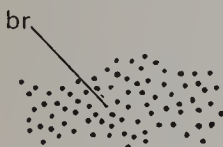
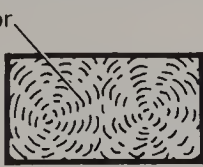
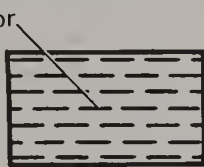


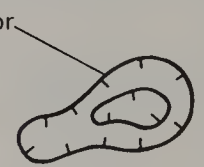
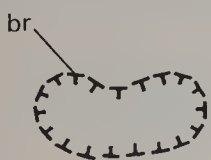
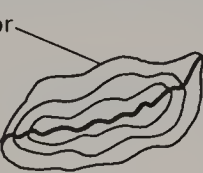
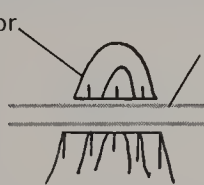
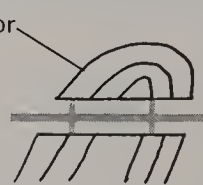
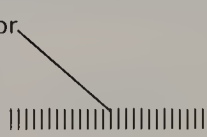
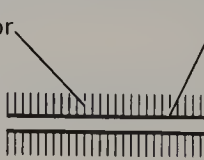
▲ Line may be broken or interrupted to indicate "under construction," as shown in Superhighway under Construction.  
● Bridge, Drawbridge, and Tunnel shown here with Dual Highway; may also be used in combination with other road or railroad symbols.



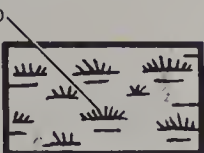






 <p>DWELLINGS</p>	 <p>BUILDINGS (Offices)</p>	 <p>IMPORTANT FACTORY</p>	 <p>Communications</p>	 <p>TELEGRAPH ALONG ROAD</p>	 <p>TELEGRAPH NOT ALONG ROAD</p>
 <p>POWER TRANSMISSION LINE</p>	 <p>TELEPHONE or PIPE LINE</p>	 <p>TELEGRAPH, TELEPHONE OFFICE</p>	 <p>WIRELESS TELEGRAPH STATION</p>	 <p>POST OFFICE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



GEOGRAPHY (continued)

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

	 WOODS; BRUSHWOODS	 SCRUB	 MANGROVE	 ORCHARD	 OASIS
 VINEYARD	 SALT MARSH	 FRESH-WATER MARSH		 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)	






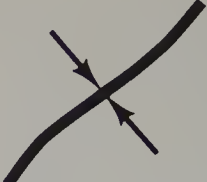














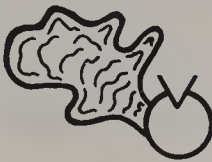

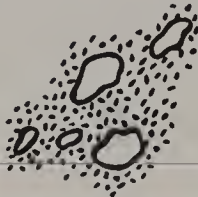









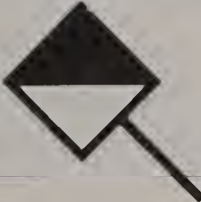
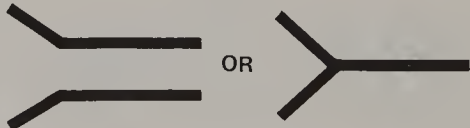
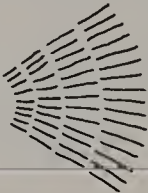






▲ Blue background would indicate submerged marsh; green background would indicate wooded marsh or swamp.

● Refers to quality of survey.

★ Also indicates 2nd Order Trigonometrical Point.

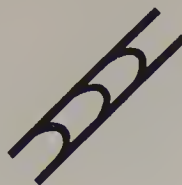





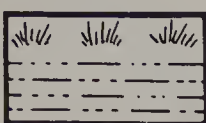















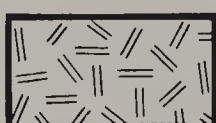
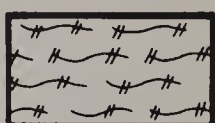











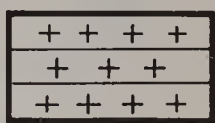


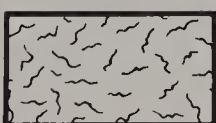



■ ▼ indicates Lowest Point in Country.



 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.







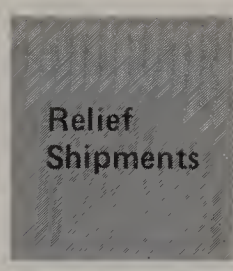
					
ALGAE	PLANT REMAINS	FISH REMAINS	FISH SCALES	GASTROPODS	VERTEBRATES
					
SOIL (Alluvium)	SAND	GRAVEL	LOESS	BRECCIA	CONGLOMERATE
					
SANDSTONE	SHALE	LIMESTONE	DOLOMITE	CHALK	COAL
					
GYPSUM	SEDIMENTARY QUARTZITE	BEDDED CHERT	GRANITE	PORPHYRY	BEDDED LAVA
	 OR 				
BASALT FLOWS	MASSIVE IGNEOUS ROCK	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

<div></div> OR <div></div> OR <div></div> OR <div></div>				<div></div> OR <div></div>	
FRAGILE				HANDLE with CARE	
<div></div> OR <div></div> OR <div></div>			<div></div>	<div></div>	<div></div>
KEEP DRY			PROTECT from HEAT	KEEP FROZEN	PROTECT against COLD
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
THIS WAY UP	SLING HERE	USE NO HOOKS	STACKING LIMIT	DO NOT STACK	INSERT LIFT CART HERE
<div></div>	<div></div>	<div></div>	<div></div> OR <div></div> OR <div></div>		
LIFT HERE	PULL	OPEN HERE	DO NOT TUMBLE		
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
DO NOT ROLL		GROSS WEIGHT kg 35	NET WEIGHT kg 28	CONTENT in LITERS L 52	DIMENSIONS cm 67-30-91
<div></div>	<div></div> OR <div></div>		<div></div>	<div></div>	<div></div>
TOP-HEAVY	HEAVY WEIGHT THIS END		BALANCE (Center of Gravity)		POISON
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
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	 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		

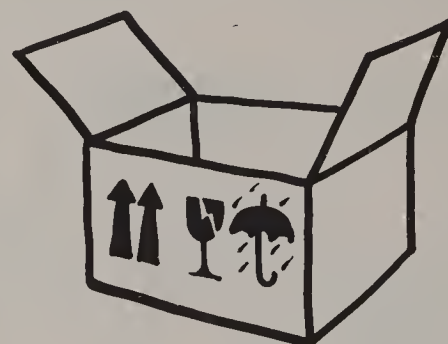
▲ This label is also made with the title Organic Peroxide.  
 ¶ ISO Recommendation

## 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:

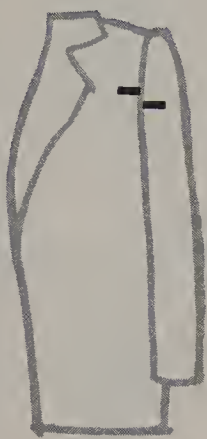
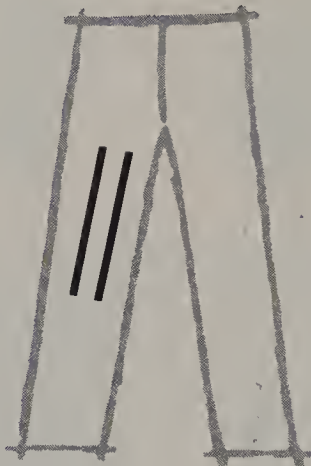
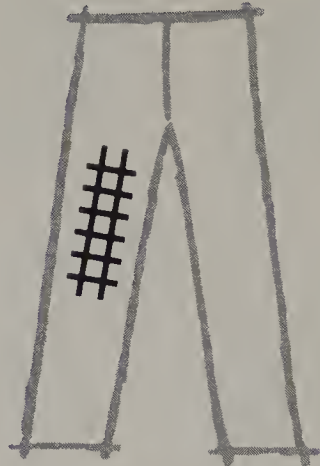
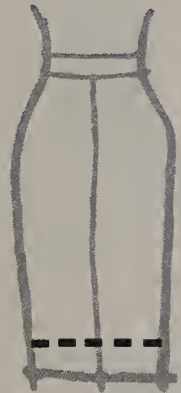
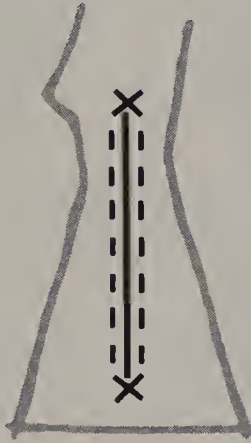
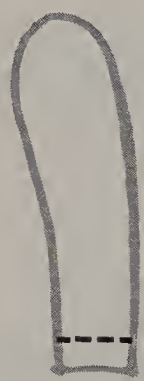
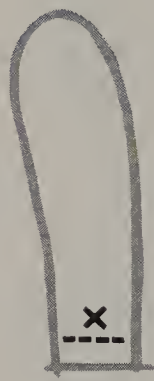
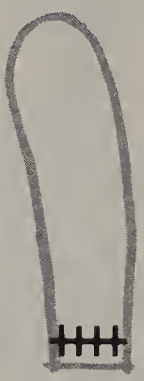



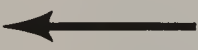











2 arrows (this side up)  
 a goblet (fragile)  
 an umbrella (keep dry)


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.



























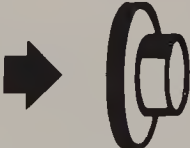




# HOME ECONOMICS

<div>Dressmaking and Tailoring</div>	 <p>MATCH MARKS to ALTER SLEEVES</p>	 <p>TAKE IN PANTS LEG</p>	 <p>LET OUT PANTS LEG</p>	
 <p>SHORTEN (Pins Out) LENGTHEN (Pins In)</p>	 <p>LET OUT (Pins Outside); TAKE IN (Pin Out Excess)</p>	 <p>SHORTEN to LINE</p>	 <p>SHORTEN ONE SLEEVE ONLY</p>	 <p>LENGTHEN amount between line and cuff</p>
 <p>OR</p> 				
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	
<div>Care Labelling</div>	 <p>OR</p> 		 <p>OR</p> 	
	WASHABLE	LAUNDER 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.

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

▲ 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
					
DRIP 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

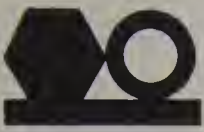


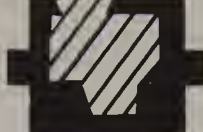


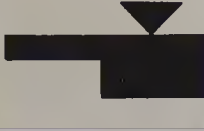





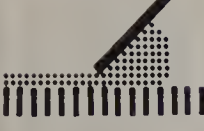
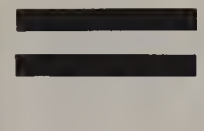
















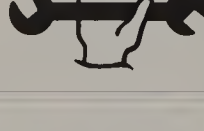
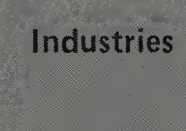
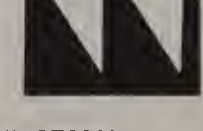
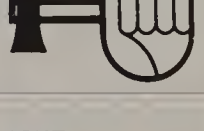






It is a rare occurrence when a trademark sheds its strictly commercial usage as a logo and emerges as a widely used symbol. But this is exactly what happened to the Woolmark symbol identifying "Pure New Wool."

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.

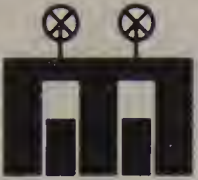













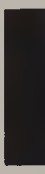















(Woolmark registered by International Wool Secretariat and usable only by their licensees. Reproduced here by special permission.)




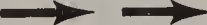


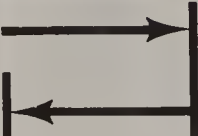

# MANUFACTURING



 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
 TEAR TAPE	 HEAT SEALING	 IMPULSE or BEAD SEALING	 END SEALING	 LONGITUDINAL SEALING	
 MAINTENANCE	 INDUSTRIES	 FACTORY DISTRICT	 LIGHT MANUFACTURING	 HEAVY 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.








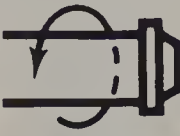



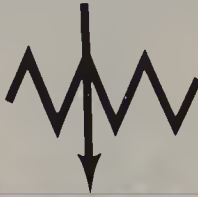















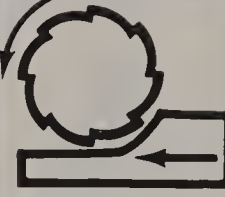
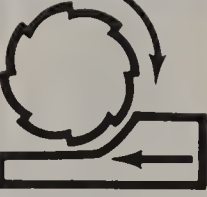













					
SLUICE	WATER POWER	STEAM POWER	ATOMIC POWER	ELECTRIC TRANSMISSION	ELECTRIC APPLIANCES
					
OIL	CERAMIC	CHEMICAL	LUMBER	PAPER	PRINTING
					
COAL MINING	MINING	BAUXITE	CHROME	COPPER	DIAMOND
					
GOLD	IRON	LEAD	MAGNESIUM	MANGANESE	NICKEL
					
SILVER	SULPHUR	TIN	TUNGSTEN	URANIUM	ZINC






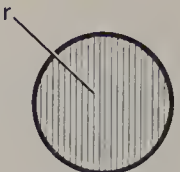



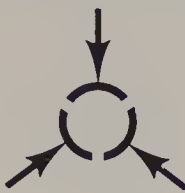





















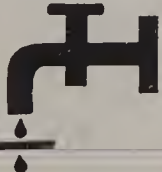
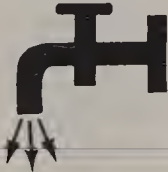









### Heavy Duty Machinery

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










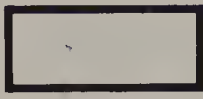


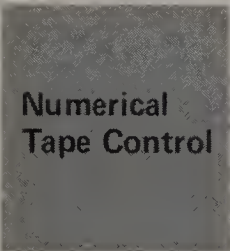














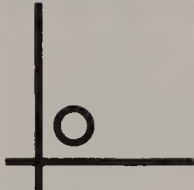

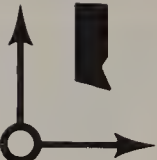
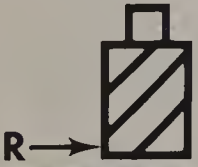





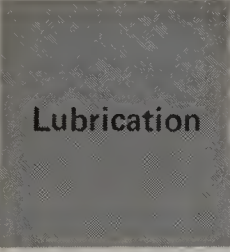





▲ Specific type of mining indicated by inserting a symbol. Example:  indicates Gold Mining;  , Iron Mining.  
 ¶ ISO Recommendation



					
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

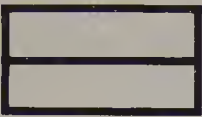




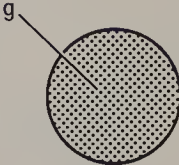

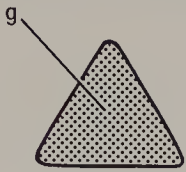



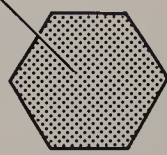






















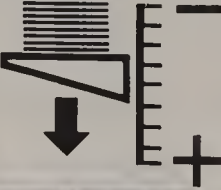





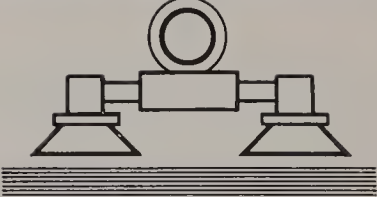
					
MAIN SWITCH	START; ON	STOP; OFF	START and STOP with same BUTTON	IN ACTION as long as button is operated	EMERGENCY STOP; MASTER STOP
		 OR 		 OR 	
BEGINNING MOTION	STOPPING MOTION	LOCK; TIGHTEN (Chuck Closed)		UNLOCK, UNCLAMP (Chuck Opened)	
					
BRAKE ON	BRAKE OFF	HALFNUT OPEN	HALFNUT CLOSED	BELT DRIVE	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





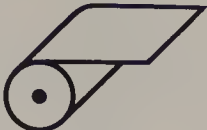
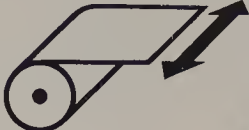







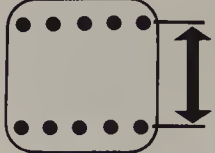
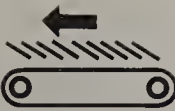
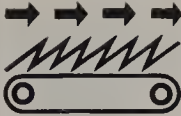
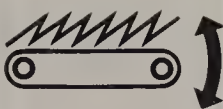
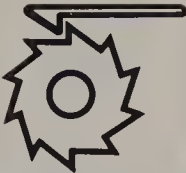


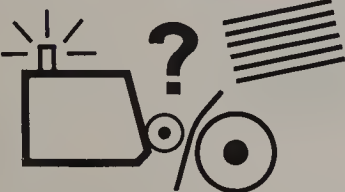
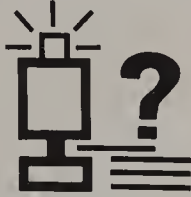


 <p>CONTROLLER CHART DRIVE</p>	 <p>MEASURING, GENERAL</p>	 <p>HAND CONTROL</p>	 <p>FOOT SWITCH</p>	 <p>STEPLESS REGULATION</p>	 <p>CURVE; CAM</p>
 <p>CLUTCH</p>	 <p>SHEAR PIN CONSTRUCTION</p>	 <p>WEIGHT</p>	 <p>PRESSURELESS CONTAINER</p>	 <p>LUBRICATION PRESS</p>	 <p>OIL LEVEL WINDOW</p>
 <p>Numerical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

ISO Recommendation



					
HYDRAULIC FLUIDS and SYNTHETIC OILS	GREASE, SYNTHETIC OIL BASE	GREASE, MINERAL OIL BASE	FOR ENTERING THE NUMBER	DAILY LUBRICATION	
					
WEEKLY LUBRICATION		MONTHLY LUBRICATION		LUBRICATE on SCHEDULE	
					
Printing Machines	PLATE ROLLER; PRINTING ROLLER	HIGH PRESSURE ROLLER	WATER DUCTOR ROLLER	PLATE ROLLERS, DOWN (Engaged)	PLATE ROLLERS, UP (Disengaged)
					
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
					
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!



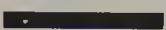






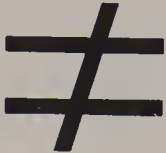
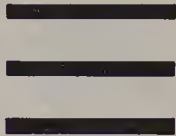

































You stand a good chance of getting what you are after if you correctly decipher the “squiggle” code with which most chocolates are marked.

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

 INFINITY	 PLUS	 MINUS	 PLUS or MINUS	 OR  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



$\ni$	$\in$	$\notin$	$\Sigma$	$\log$	$\ln$
SUCH THAT	BELONGS TO	DOES NOT BELONG TO	SUM	LOGARITHM	NATURAL LOGARITHM
$e$	$\pi$	$\sqrt[n]{a}$	$n!$	$ x $	$\langle x \rangle$
"e" (2.71828...)	PI (3.1416...)	$n$ 'th ROOT OF $a$	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              | Male                |
| Passive             | Active              |
| Moon                | Sun                 |
| Earth               | Heaven              |
| Black in color      | Red in color        |
| Ox                  | Horse               |
| Even numbers        | Odd numbers         |
| Cold                | Warm                |
| Dark                | Bright              |
| Valleys and Streams | Hills and Mountains |



YANG




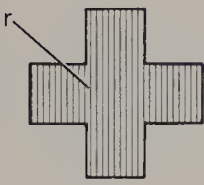

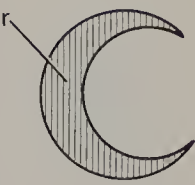




































Yin and Yang when interlocked, represent perfect unity, the universe, eternity.

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.

















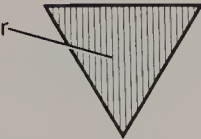

- |  |  |
|--|--|
| K'UN: Southwest, mother, earth, black, ox, afternoon, late summer            | CH'IEN: Northwest, father, heaven, deep crimson, horse, night, late autumn         |
| SUN: Southeast, eldest daughter, wind, white, cock, forenoon, late spring    | CHÊN: East, eldest son, thunder, yellow-green, dragon, dawn, spring                |
| LI: South, middle daughter, lightning, sun, fire, pheasant, noon, mid-summer | K'AN: North, middle son, moon, rain, clouds, bright red, pig, midnight, mid-winter |
| TUI: West, youngest daughter, lake or marsh, sheep, evening, mid-autumn      | KÊN: Northeast, youngest son, mountain, dog, pre-dawn, late winter                 |

MEDICINE






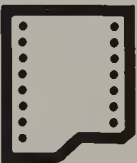












					
CADUCEUS; Staff of Hermes (Mercury)	STAFF of AESCULAPIUS	MEDICAL ALERT	RED CROSS	RED LION and SUN	RED CRESCENT
					
RED STAR of DAVID	PSYCHOLOGY	VETERINARY SERVICES	IN RELATION TO	CUM (With)	SINE (Without)
					
INJECTIONS; VACCINATION	BY HYPODERMIC	INTRAVENEOUSLY	INTRAMUSCULARLY	ORALLY	RECTALLY
					
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
 MOLAR	OR 	 PRE-MOLAR	 INCISOR	OR 	 VASECTOMY
 U.S.A. PLANNED PARENTHOOD	 Korea	 India	 Brazil		

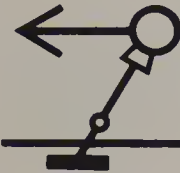
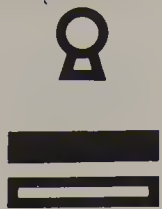





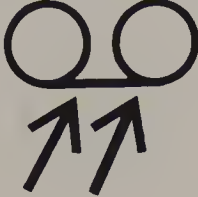




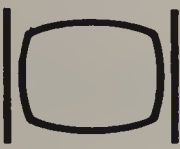








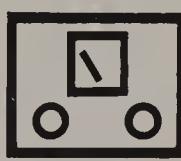
















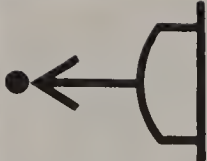
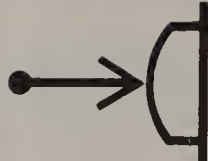

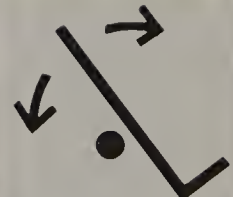
Equipment

 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



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

▲ Radiation intensity is shown increasing from left to right.













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



				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
					
DRESSING ROOMS, NURSES	DRESSING ROOMS, female technicians	DRESSING ROOMS and BATHROOMS	CLEAN CLOTHING	SOILED CLOTHING	TRASH
	OR 				
BLOOD DONORS		HEMATOLOGY	BLOOD BANK	SERUM LABORATORIES	LABORATORY



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

					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?

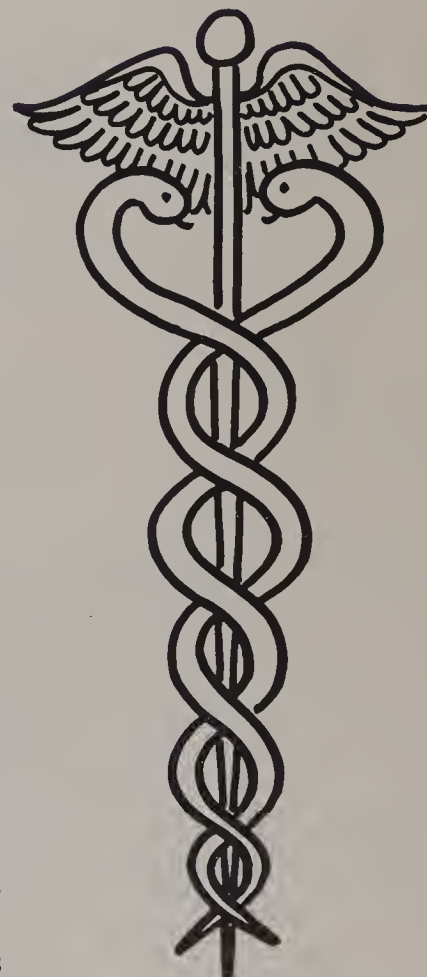
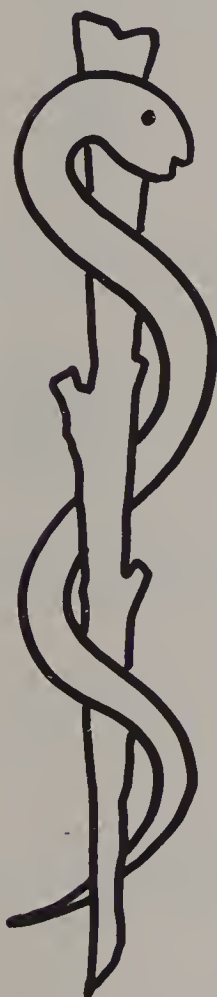
Aesculapius, the mythological god of medicine, carried a knotty wooden staff entwined with a *single* snake representing life-giving powers. In 1910 the American Medical Association adopted this staff as its insignia. The British and French armies, World Health Organization, U.S. Air Force Medical Service,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



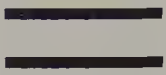
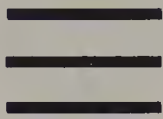















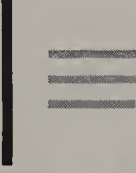
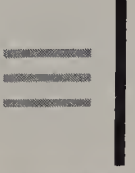



















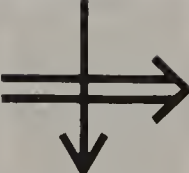

In ancient Rome the name for Hermes was Mercury and messengers carried his symbol as a sign of neutrality. And so their medicos, searching battlefields for the wounded, carried the Caduceus to establish their noncombatant status.




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.



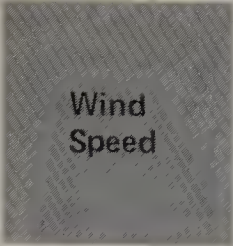



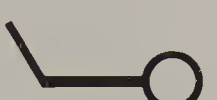
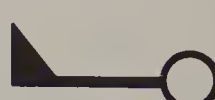
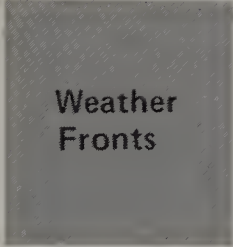


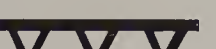



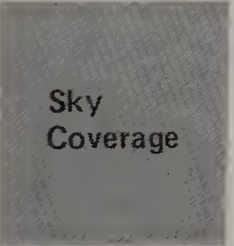












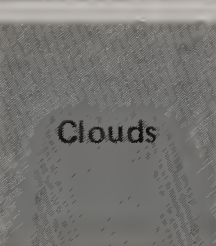



















# METEOROLOGY




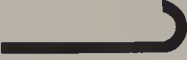
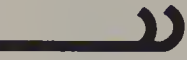
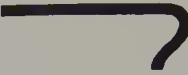



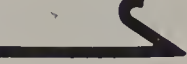


 VISIBILITY reduced by smoke	 HAZE	 LIGHT FOG	 HEAVY FOG; ICE FOG	 DUST WHIRLS	 DUST or SAND STORM
 TORNADO (Funnel Cloud)	 TROPICAL STORM	 HURRICANE	 SQUALL	 DRIZZLE	 SLIGHT FREEZING DRIZZLE
 SLIGHT RAIN, INTERMITTENT	 SLIGHT RAIN, CONTINUOUS	 MODERATE RAIN, INTERMITTENT	 MODERATE RAIN, CONTINUOUS	 HEAVY RAIN, INTERMITTENT	 HEAVY RAIN, CONTINUOUS
 PRECIPITATION during Past Hour	 INCREASED Phenom- enon during Past Hour	 DECREASED Phenom- enon 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.



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

- ▲ 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

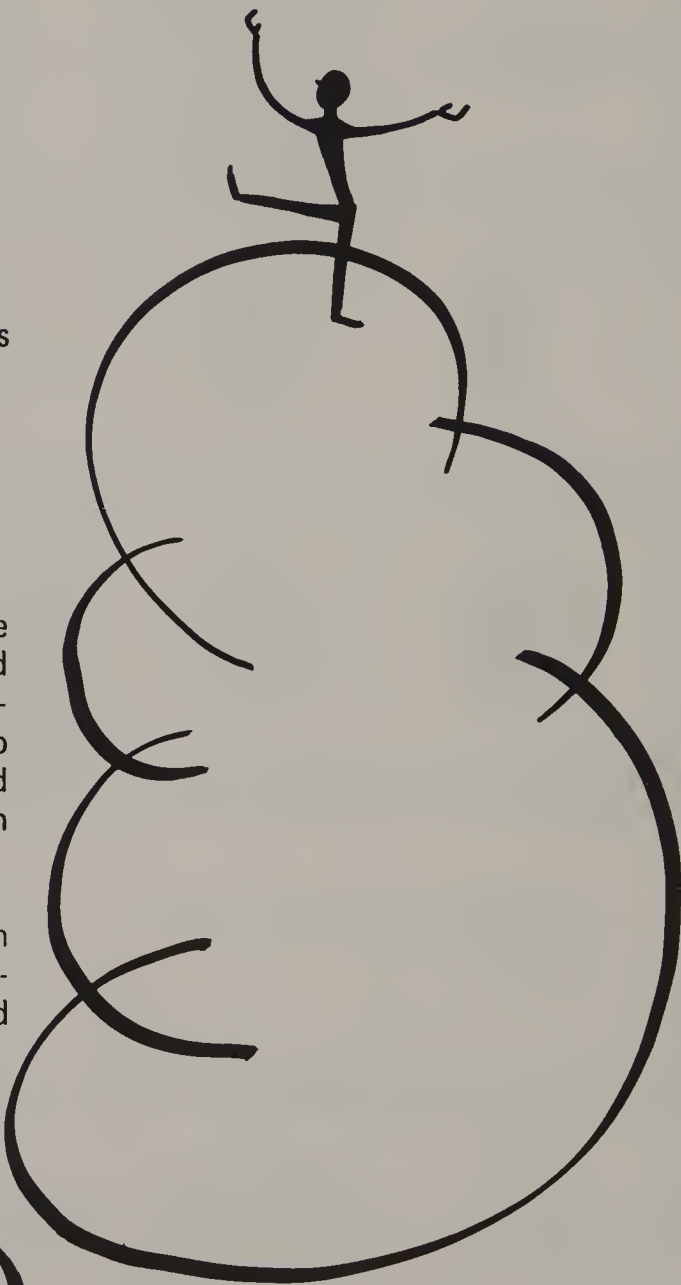
CLOUD 9

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 cumulo-nimbus 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.



# MUSIC

Diagram illustrating the musical staff and the diatonic scale in C major. The staff shows the sequence of notes: C, D, E, F, G, A, B, C, D, E, F, G, A, B, C, D, E, F, G, A, B, C. The scale is labeled with solfège names: Do, Re, Mi, Fa, So, La, Te, Do. The diagram also shows ledger lines below and above the staff, and a bracket indicating an octave.

DIATONIC SCALE (in key of C)








<div>Lines</div> <div>5</div> <div>4</div> <div>3</div> <div>2</div> <div>1</div> <div>Spaces</div> <div>4</div> <div>3</div> <div>2</div> <div>1</div>					
STAFF	TREBLE (G) CLEF	BASS (F) CLEF	ALTO (C) CLEF	BAR LINE	MEASURE
FINAL BAR	WHOLE NOTE	HALF NOTE	QUARTER NOTE	EIGHTH NOTE	
SIXTEENTH NOTE		WHOLE REST	HALF REST	QUARTER REST	EIGHTH REST
SIXTEENTH REST	MEASURES REST	TRIPLET	3/4 TIME	4/4 TIME	2/2 TIME

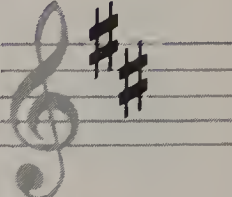

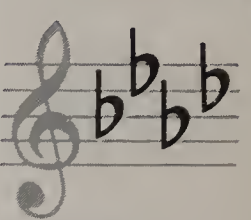
▲ A single dot (•) after the note increases its value by one-half. Example:  $d\bullet = d\text{ } \frac{1}{2}$

● Number of measures of rest shown above staff.



# 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)

						
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.






















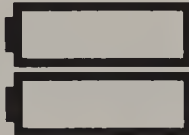










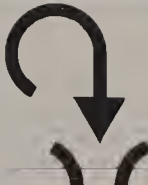

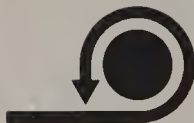







A 15th-century calligrapher took the term "round" literally and wrote his tune in disc-like fashion and, I daresay, spun it around so the proper note came in front of the singer when it was his turn to join in.

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






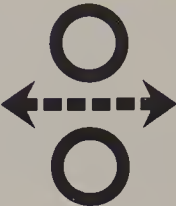








PHOTOGRAPHY

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



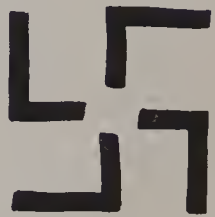
It is related to the anatomical three-legged triskelion, which indeed races around showing movement as well as any symbol we know?

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

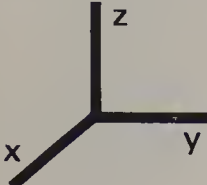

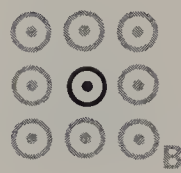


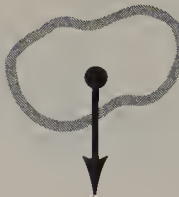
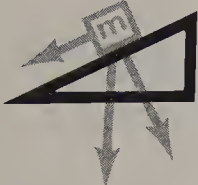
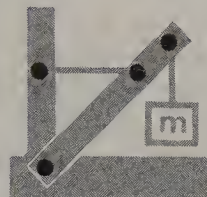


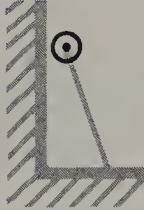
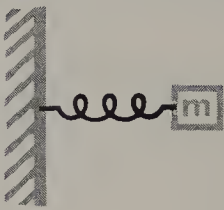
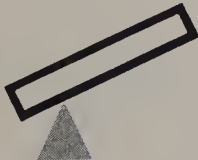
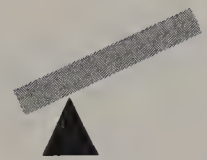
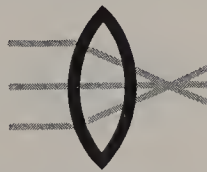
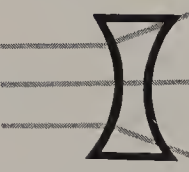




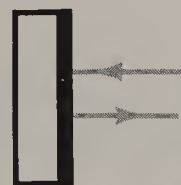




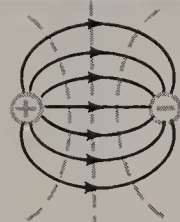
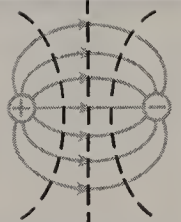
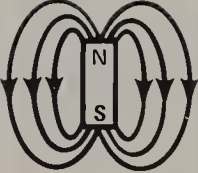

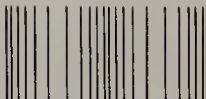
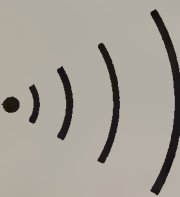





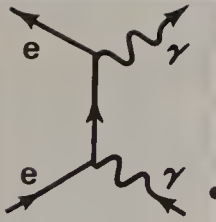
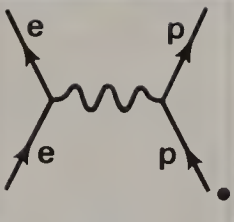



Swastikas face clockwise or counterclockwise. In India the former relates to the masculine and signifies leading to the outer world; the latter represents the feminine and indicates leading to the inner mind of man.




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

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

▲ Also shown as   
● Feynman Diagram

## Letter Symbols

<b>A</b> AMPERE; AREA; MASS NUMBER	<b>h</b> HECTO; PLANCK CONSTANT; HEIGHT	$(hkl)$ LATTICE PLANE
<b>B</b> MAGNETIC FLUX DENSITY	<b>k</b> KILO; BOLTZMANN CONSTANT	$[hkl]$ DIRECTION in LATTICE
<b>C</b> COULOMB; CAPACITANCE; COMPTON WAVELENGTH	<b>l</b> LITER; LENGTH; MEAN FREE PATH	$\text{\AA}$ ANGSTRÖM
<b>E</b> ENERGY; ELECTRIC FIELD STRENGTH	<b>m</b> METER; MILLI	$^{\circ}\text{C}$ DEGREE CELSIUS
<b>F</b> FARAD; FORCE	<b>n</b> NANO; NEUTRON; REFRACTIVE INDEX; NUMBER DENSITY of MOLECULES	$^{\circ}\text{F}$ DEGREE FAHRENHEIT
<b>G</b> GAUSS; GIGA; GRAVITATIONAL CONSTANT	<b>p</b> PICO; PROTON; MOMENTUM	$\Omega$ OHM; SOLID ANGLE
<b>H</b> HENRY; MAGNETIC FIELD STRENGTH	<b>r</b> RADIUS	$\mu$ MICRO; MUON; PERMEABILITY; MAGNETIC MOMENT OF PARTICLE; ATTENUATION COEFFICIENT
<b>I</b> ELECTRIC CURRENT; MOMENT of INERTIA	<b>s</b> SECOND	$\Lambda$ LAMBDA PARTICLE
<b>J</b> JOULE	<b>t</b> TON; TRITON; TIME	$\Sigma$ SIGMA PARTICLE
<b>K</b> KELVIN; K-MESON	<b>v</b> or <b>v</b> VELOCITY	$\Xi$ XI PARTICLE
<b>L</b> ANGULAR MOMENTUM; SELF-INDUCTANCE	<b>a<sub>0</sub></b> BOHR RADIUS	$\alpha$ ALPHA PARTICLE; FINE STRUCTURE CONSTANT
<b>M</b> MEGA	<b>atm</b> ATMOSPHERE	$\pi$ PION
<b>N</b> NEWTON; NUMBER of MOLECULES; NEUTRON NUMBER	<b>cd</b> CANDELA	$\gamma$ PHOTON; TIME DILATION FACTOR
<b>P</b> POWER	<b>Ci</b> CURIE	$\nu$ NEUTRINO; FREQUENCY;
<b>Q</b> ELECTRIC CHARGE; QUALITY FACTOR	<b>da</b> DEKA	$\omega$ SOLID ANGLE; ANGULAR VELOCITY; ANGULAR FREQUENCY
<b>R</b> RESISTANCE	<b>eV</b> ELECTRONVOLT	$\lambda$ WAVELENGTH; MEAN FREE PATH; DECAY CONSTANT
<b>T</b> TESLA; TERA; PERIOD	<b>Hz</b> HERTZ	$\tau$ RELAXATION TIME; TIME CONSTANT
<b>V</b> VOLT; ELECTRIC POTENTIAL; VOLUME	<b>lm</b> LUMEN	$\rho$ DENSITY
<b>W</b> WATT; WORK	<b>lx</b> LUX	$\beta$ PARTICLE SPEED DIVIDED BY SPEED OF LIGHT
<b>Z</b> IMPEDANCE; ATOMIC NUMBER	<b>m<sub>H</sub></b> HYDROGEN ATOMIC MASS	$\phi$ PHASE DISPLACEMENT
<b>b</b> BARN; BREADTH	<b>mmHg</b> MILLIMETER of MERCURY	$\epsilon$ PERMITTIVITY
<b>c</b> CENTI; SPEED of LIGHT in a VACUUM; MOLECULAR VELOCITY	<b>mol</b> MOLE	$\Theta$ CHARACTERISTIC TEMPERATURE
<b>d</b> DECI; DISTANCE BETWEEN LATTICE PLANES; THICKNESS; DIAMETER; DEUTERON	<b>N<sub>A</sub></b> AVOGADRO CONSTANT	$\sigma$ STEFAN-BOLTZMANN CONSTANT; CROSS SECTION
<b>e</b> ELECTRON; PROTON CHARGE	<b>R</b> RYDBERG CONSTANT	$\Psi$ WAVE FUNCTION
<b>f</b> FEMTO; FREQUENCY	<b>rad</b> RADIAN	$\theta$ BRAGG ANGLE
<b>g</b> GRAM; ACCELERATION of FREE FALL	<b>r<sub>e</sub></b> ELECTRON RADIUS	
	<b>sr</b> STERADIAN	
	<b>Wb</b> 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)



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

- ▲ 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				

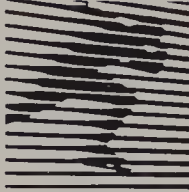



	1948	1964	1968	1972
Swimming				
Sailing				
Canoeing				
Rowing				
Water Polo				
Volleyball				
Basketball				



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

▲ Handball, Jai Alai, Squash, Tennis.  
● Equestrian, Fencing, Pistol Shooting, Swimming, Track and Field.

	 GIANT SLALOM	 OR  SLALOM	 OR  DOWN HILL SKIING
 SKI JUMPING		 OR  CROSS-COUNTRY SKIING	 OR  BIATHLON
 ICE HOCKEY		 OR  SPEED SKATING	 OR  FIGURE SKATING
 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.









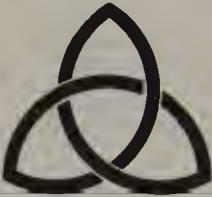








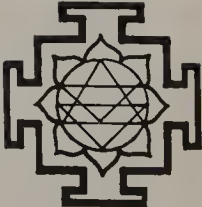
The U.S. Forest Service selected Smokey as the national symbol for forest fire prevention. Shortly thereafter the United States Congress unanimously passed the Smokey Bear law to protect Smokey's name and character, and thus maintain his status.

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.



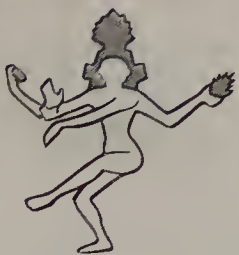

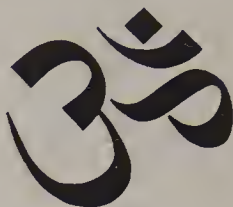
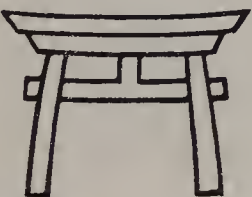


RELIGION

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

▲ 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.



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



## 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








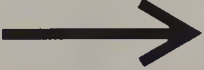
















 <p>LOOK OUT! (Safety Alert)</p>	 <p>FIRST AID</p>	 <p>NO ENTRY</p>	 <p>NO ENTRY to PEDESTRIANS</p>	 <p>EMERGENCY EXIT (Escape Route)</p>	 <p>FIRE ALARM</p>		
 <p>ACCESS for the HANDICAPPED</p>	 <p>ACCESS for the AMBULANT</p>	 <p>KEEP AWAY from CHILDREN</p>	 <p>WATCH for WORK VEHICLES</p>	 <p>SLOW MOVING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




				 OR	
NO OPEN FLAME PERMITTED	FIRE PROTECTION EQUIPMENT	DIRECTION for FIREMEN	FIRE HOSE	DON'T EXTINGUISH with WATER	
	OR 				
FIRE EXTINGUISHER		DO NOT PIERCE; KEEP from HEAT	PROTECTION and SAFETY EQUIPMENT	WEAR PROTECTIVE CLOTHES	WEAR PROTECTIVE BELT
		OR 		 OR	
WEAR BOOTS	WEAR GLOVES		WEAR EAR PROTECTION (Noise)	WEAR GOGGLES	
	OR 		OR 		
WEAR GAS MASK		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.

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!"

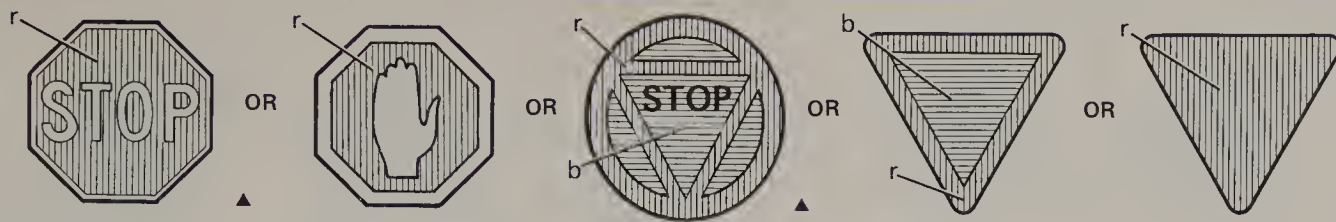
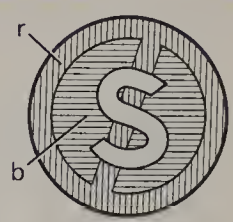
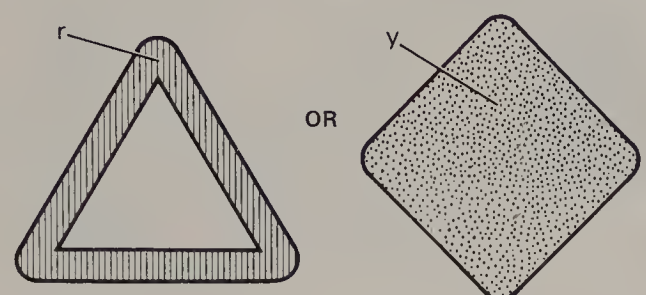

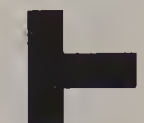

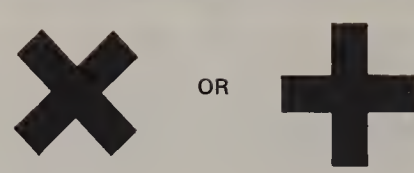






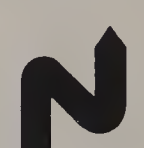
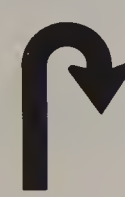
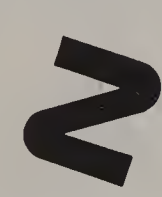
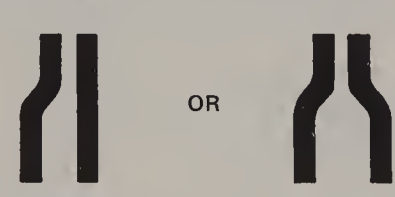
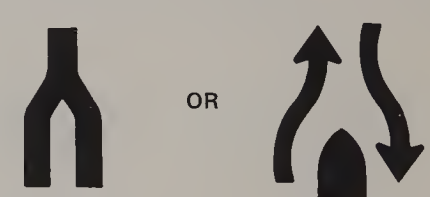
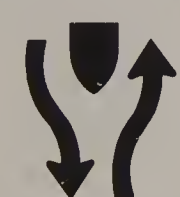











Caution: Sharp



Forbid: Hot



<div></div> <p>STOP</p>			<div></div> <p>NO STOPPING</p>		
<div></div> <p>WARNING, DANGER, CAUTION</p> <p>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.</p>			<div></div> <p>"T" JUNCTION</p>	<div></div> <p>SIDE ROAD</p>	<div></div> <p>MERGING TRAFFIC</p>
			<div></div> <p>INTERSECTION; CROSSROADS</p>		<div></div> <p>INTERSECTION with non-priority road</p>
<div></div> <p>STAGGERED JUNCTION</p>	<div></div> <p>"Y" JUNCTION</p>	<div></div> <p>LEFT BEND</p>	<div></div> <p>RIGHT BEND</p>	<div></div> <p>DOUBLE BEND, LEFT</p>	<div></div> <p>DOUBLE BEND, RIGHT</p>
<div></div> <p>HAIRPIN BEND</p>	<div></div> <p>SERIES of BENDS</p>	<div></div> <p>ROAD NARROWS</p>		<div></div> <p>DIVIDED ROAD ENDS</p>	
<div></div> <p>DIVIDED ROAD BEGINS</p>	<div></div> <p>PASS EITHER SIDE</p>	<div></div> <p>TWO-WAY TRAFFIC</p>	<div></div> <p>2-WAY TRAFFIC across 1-Way Street</p>	<div></div> <p>TRAFFIC CIRCLE (Roundabout) AHEAD</p>	<div></div> <p>HUMP BRIDGE</p>
<div></div> <p>BUMP</p>	<div></div> <p>ROUGH or BUMPY ROAD</p>			<div></div> <p>DIP</p>	<div></div> <p>DRIFT</p>

▲ "STOP" often translated into language of country.



 OR 	 OR 	 Blinking Light OR  Alternately Blinking Lights			
STEEP ASCENT	STEEP DESCENT	GRADE CROSSING			
 OR 	 OR 				
STOP AHEAD	TRAFFIC SIGNAL AHEAD	STOP- GO CONTROL AHEAD	SCHOOL PATROL AHEAD		
					
YIELD SIGN AHEAD	FALLING ROCKS	LOOSE GRAVEL	SLIPPERY ROAD	NARROW BRIDGE	NARROW STRUCTURE
					
QUAYSIDE or RIVER BANK	DRAWBRIDGE	GATE	MOTOR GATE	GRADE CROSSING (Railroad)	FLASHING LIGHT AHEAD (Railroad)
			 OR 		
GRADE CROSSING without GATES	GRADE CROSSING with GATES	GRADE CROSSING, automatic half-barriers	ROAD WORK AHEAD	TRUCK CROSSING	
 OR 					
CHILDREN CROSSING	PEDESTRIAN CROSSING	ANIMAL CROSSING	WILD ANIMAL CROSSING	LOW FLYING AIRCRAFT	
 OR 					
TUNNEL	SOFT SHOULDER	CROSS WIND	OVERHEAD CABLE	OTHER DANGERS	

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



<div></div> <div>RESTRICTION</div>		<div></div> <div>PROHIBITION</div>		<div></div> <div>NO ENTRY (All Vehicles)</div>		<div></div> <div>NO RIGHT TURN</div>		<div></div> <div>NO "U" TURNS</div>			
<div>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.</div>				<div></div> <div>NO CROSSING by VEHICLES</div>		<div></div> <div>NO LANE CHANGING</div>		<div></div> <div>PRIORITY for oncoming traffic</div>			
<div></div> <div>OR</div> <div></div> <div></div> <div>OR</div> <div></div> <div></div> <div>NO PASSING</div>				<div></div> <div>KEEP RIGHT</div>		<div></div> <div></div> <div>OR</div> <div></div> <div></div> <div>NO PASSING by GOODS VEHICLES</div>					
<div></div> <div>STOP for Light Vehicles (except Bicycles)</div>		<div></div> <div>NO HANDCARTS</div>		<div></div> <div>NO BICYCLES</div>		<div></div> <div>NO MOPEDS</div>		<div></div> <div>NO MOTORCYCLES</div>		<div></div> <div>NO RIDING DOUBLE on MOTORCYCLE</div>	
<div></div> <div>NO ANIMAL-DRAWN VEHICLES</div>		<div></div> <div>NO MOTOR VEHICLES</div>		<div></div> <div></div> <div>NO MOTOR VEHICLES (any kind)</div>		<div></div> <div>NO ENTRY, BUS</div>		<div></div> <div>NO ENTRY, GOODS VEHICLE</div>		<div></div> <div>NO ENTRY, Motor Vehicle with Trailer</div>	
<div></div> <div>NO ENTRY, Motor or Animal-drawn Vehicles</div>		<div></div> <div>MAXIMUM SPEED LIMIT</div>		<div></div> <div>NO ENTRY, Vehicle exceeding WIDTH</div>		<div></div> <div>NO ENTRY, Vehicle exceeding HEIGHT</div>		<div></div> <div>MAXIMUM WEIGHT on AXLE</div>		<div></div> <div>NO ENTRY, Vehicle exceeding LENGTH</div>	
<div></div> <div>LOW BEAM LIGHTS ONLY</div>		<div></div> <div>DIM LIGHTS</div>		<div></div> <div>NO HORN BLOWING</div>		<div></div> <div>COMPULSORY STOP</div>		<div></div> <div>POLICE and INSPECTION</div>		<div></div> <div>PEDESTRIANS KEEP LEFT</div>	

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




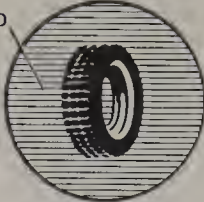





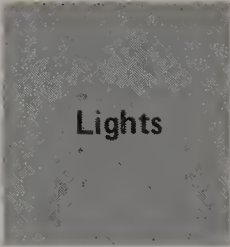



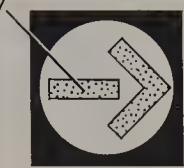




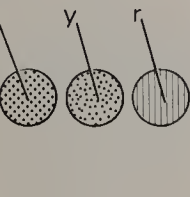
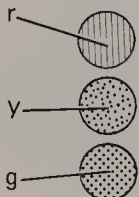
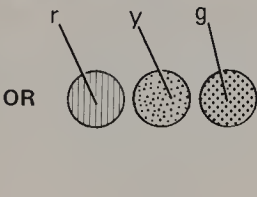
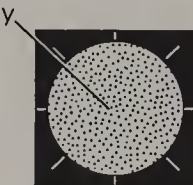
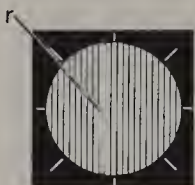

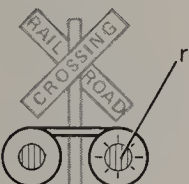
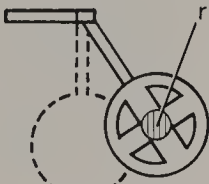
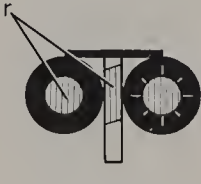
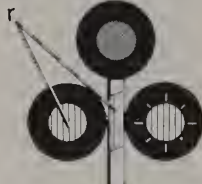
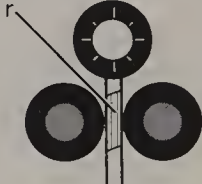
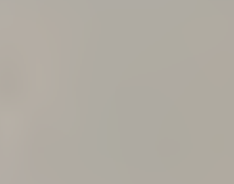
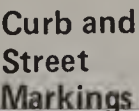
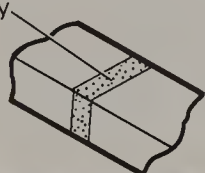
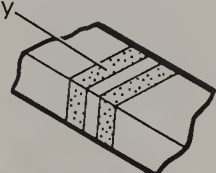
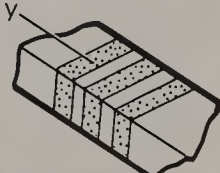
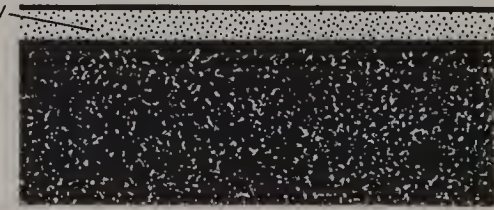
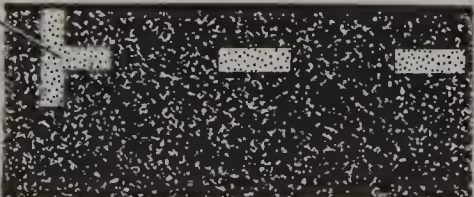
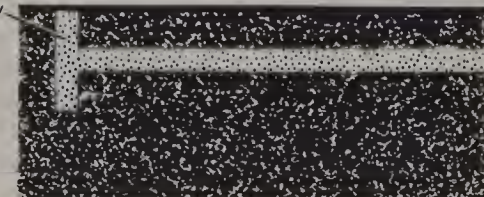
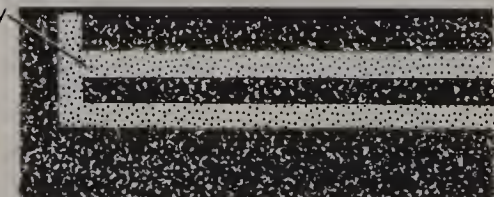
● Other reasons for stopping may be indicated. Example: STOP - CHILDREN; STOP - WEIGHT CHECK.



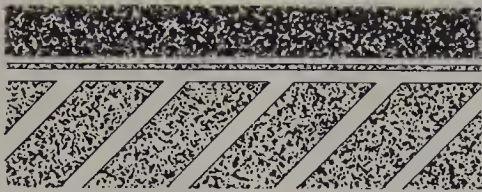


 <p>ROUTE MARKER, INTERSTATE</p>	 <p>ROUTE MARKER, ASSEMBLY</p>	 <p>ROUTE MARKER, U. S. (State)</p>	 <p>OR</p> 	 <p>PARKING OFF ROAD</p>	
 <p>METERED PARKING</p>	 <p>PARKING DISC COMPULSORY</p>	 <p>OR</p> 	 <p>NO PARKING on ODD DATES</p>	 <p>NO PARKING on EVEN DATES</p>	
 <p>NO PARKING on LEFT</p>	 <p>NO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



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





PAVED SHOULDERS

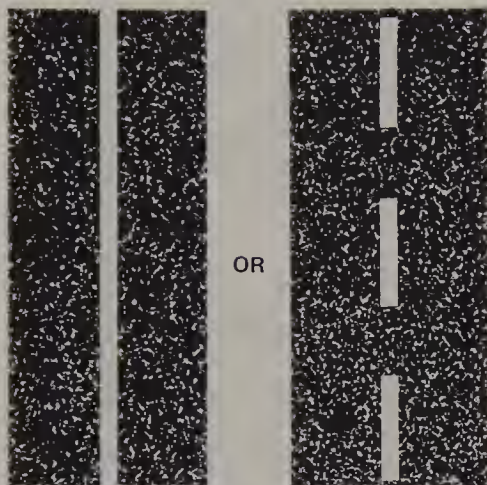


CYCLING LANE

OR

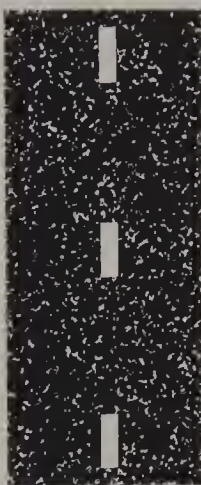


Motor Vehicles Permitted



OR

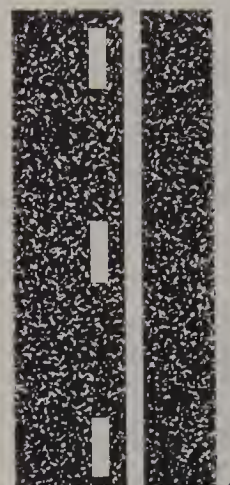
CENTER LINE



LANE LINE



WARNING LINE



NO CROSSING if  
solid line on your side



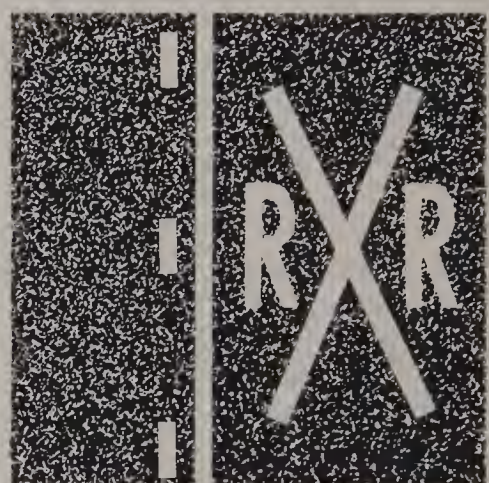
NO CROSSING  
(either side)



STOP Controlled by Sign



STOP Controlled by Traffic Signal



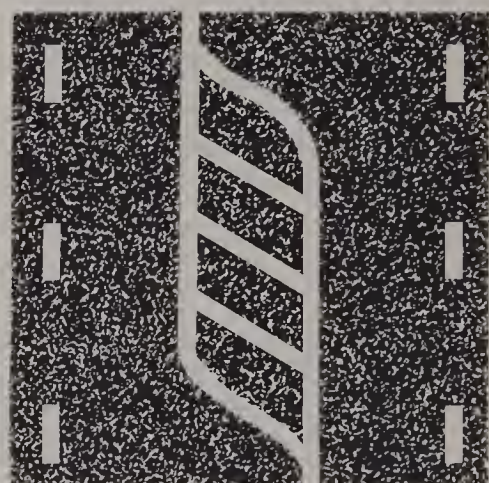
RAILROAD CROSSING



YIELD Controlled without Sign




YIELD Controlled with Sign



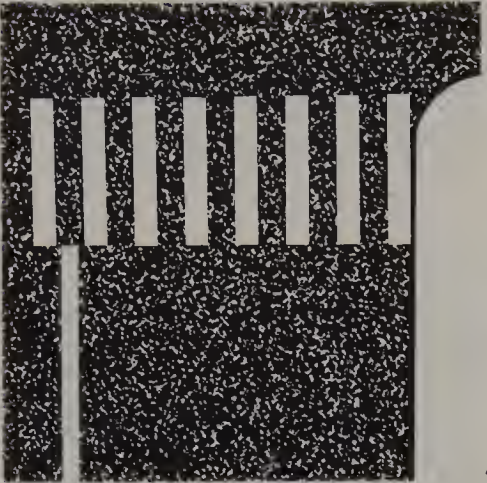
DO NOT ENTER MARKED AREA

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






OR




▲

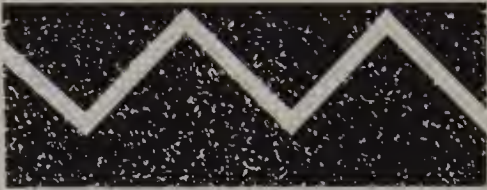
PEDESTRIAN CROSSWALK



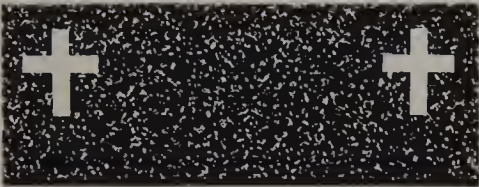
OR



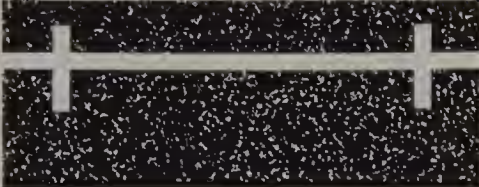
INDICATION of TRAFFIC LANES



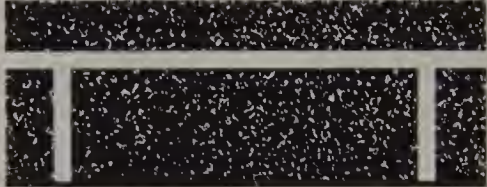
PARKING RESTRICTION



OR





















OR



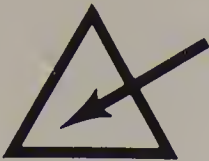



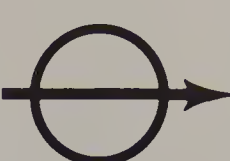












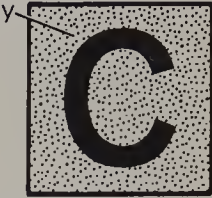
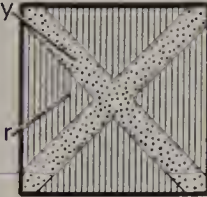
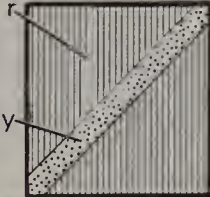


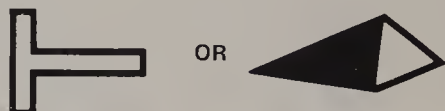






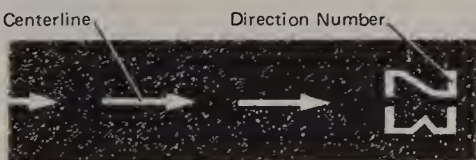
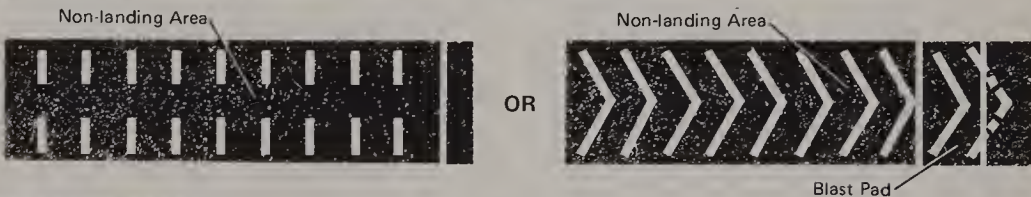
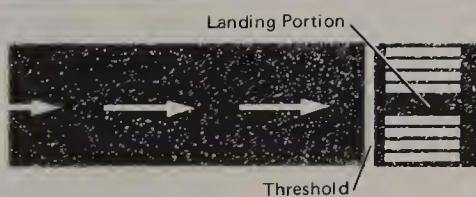
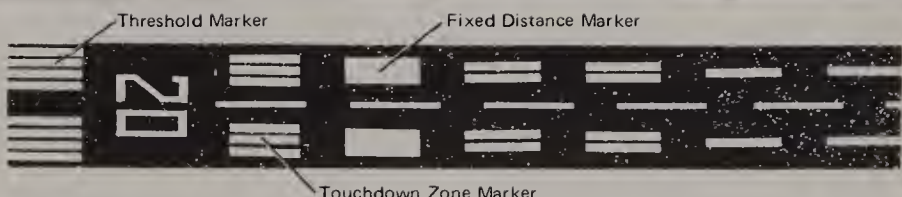
PARKING SPACE LIMITS

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.



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

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

Marine

<div></div> <div>PERMISSION</div>	<div></div> <div>RESTRICTION</div>	<div></div> <div>PROHIBITION</div>	<div></div> <div>OBLIGATION to STOP</div>	<div></div> <div>KEEP SHARP LOOKOUT</div>	<div></div> <div>SOUND HORN</div>
<div>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.</div>			<div></div> <div>PROCEED in this DIRECTION</div>	<div></div> <div>MOVE to port side of channel</div>	<div></div> <div>MOVE to starboard side of channel</div>

▲ 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.



















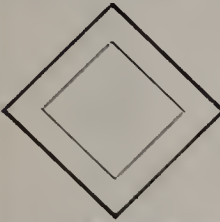



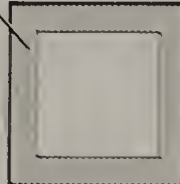
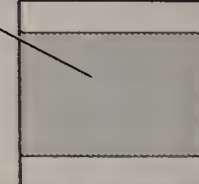


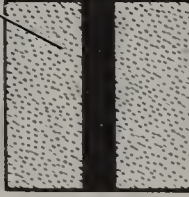


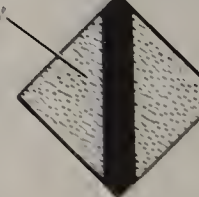
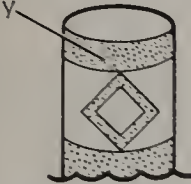
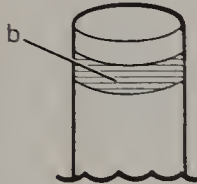
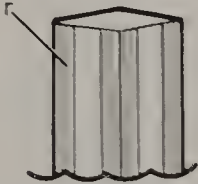
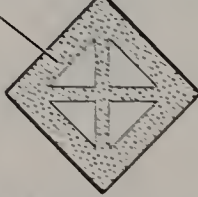

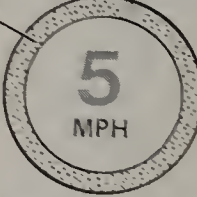
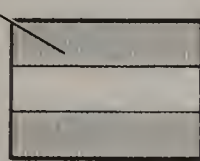

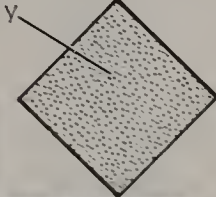
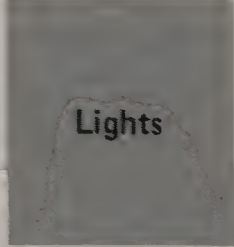
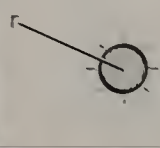
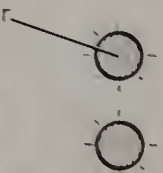


CROSS CHANNEL to PORT	CROSS CHANNEL to STARBOARD	KEEP to PORT side of channel	KEEP to STARBOARD side of channel	NO PASSING or OVERTAKING	ABSOLUTELY NO OVERTAKING
NO OVERTAKING of Convoys by Convoys	CROSSING larger waterway	ENTERING larger waterway	CROSSING TRIBUTARY	ENTRANCE of TRIBUTARY	TURNING BASIN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

▲ May be any prescribed kilometers per hour.


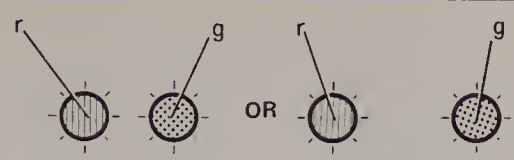

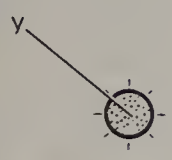
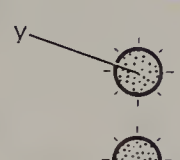

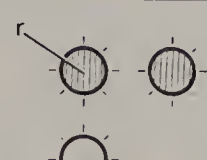
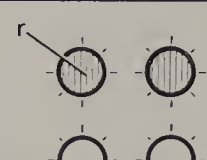
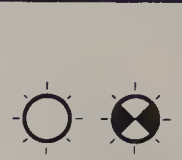



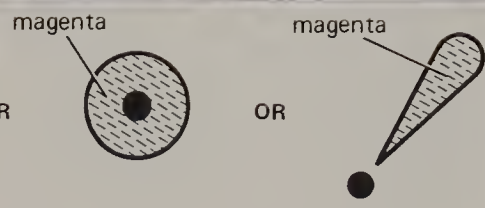

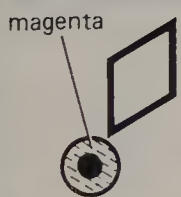










● Anchor inverted when used in Prohibition square.

★ 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.




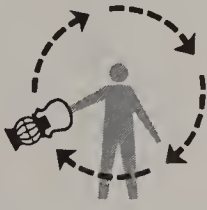


 OR  PORT LIMITS of CHANNEL	 NUN	 SPAR	 BELL	 WHISTLE	
 LIGHTED	 OR  Spheres CHANNEL is CLEAR	 OR  Sphere CHANNEL is not CLEAR	 DIVER'S FLAG		
 OR  DANGER POINT on LEFT BANK	 OR  DANGER POINT on RIGHT BANK	 OR  DANGER POINT in MID-CHANNEL			
 OR  OR  POSITION of Channel from Left Bank	 OR  OR  POSITION 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.


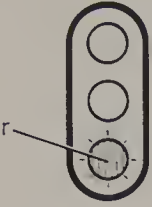


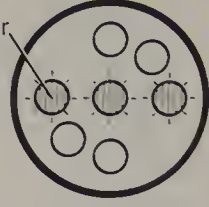


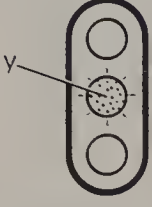
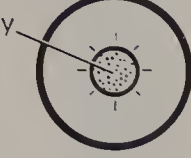

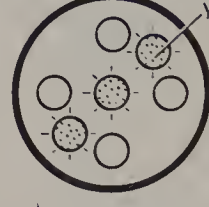



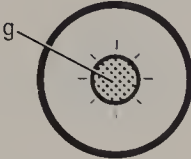
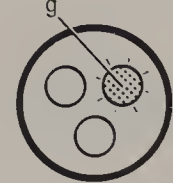
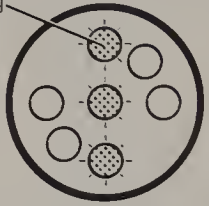



 <p>NO PASSAGE between the LIGHTS</p>	 <p>STOP; STAND BY to PROCEED</p>		 <p>GO AHEAD</p>			
 <p>GO AHEAD with CAUTION</p>	 <p>GO AHEAD; No Opposite Traffic</p>	 <p>DON'T CAUSE WASH</p>	 <p>OBSTACLE, pass by Double Light</p>	 <p>OBSTACLE, pass either side</p>	 <p>STEER TOWARDS Intermittent Light</p>	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

# Rail

 <p>PROCEED</p>	 <p>REDUCE SPEED</p>	 <p>STOP</p>	 <p>BACK</p>	 <p>APPLY AIR BRAKES</p>	 <p>RELEASE AIR BRAKES</p>
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▲ Words or initials are often used with symbol to identify a specific type of buoy. Example:  C means Can Buoy,  BELL, Bell Buoy.


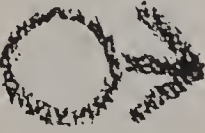

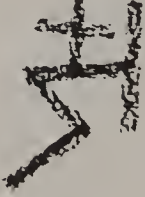
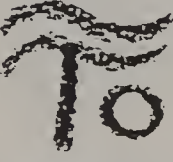


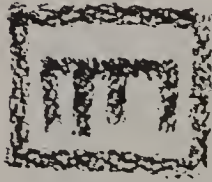
<div> OR </div> <div> OR  OR </div>					 SPEED LIMIT	
<div> OR </div> <div> OR  OR </div>					 STATION WARNING	
<div> OR </div> <div> OR  OR </div>					 WHISTLE POST	

▲ 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.








































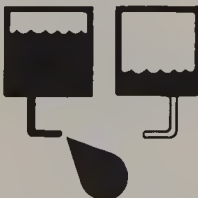




# VEHICLE CONTROLS

					
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
 TRANSMISSION OIL TEMPERATURE	 NEUTRAL	 OR  DRIVE	 HIGH-RATIO GEAR	 FRONT-WHEEL DRIVE	
 TOW	 PARK	 OR  BRAKE		 BRAKE OIL	 BRAKE OIL PRESSURE
 HAND BRAKE ENGAGED	 HAND BRAKE DISENGAGED	 HYDRAULIC RESERVOIR	 OR  FUEL		 DIESEL FUEL
 FUEL SHUT-OFF	 PRIMER PUMP	 OR  OR  CHOKE	 HAND THROTTLE		
 OR  EMPTY		 OR  HALF FULL		 OR  FULL	
 OR  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	 HEAD LIGHTS, DIM
 PARKING LIGHTS	 WORK LIGHT	 PASSING LIGHT	 ROTATING LIGHT (Emergency Vehicle)		
 INSTRUMENT PANEL LIGHT	 BLACKOUT HEADLIGHTS	 BLACKOUT CLEAR- ANCE LIGHTS	 EMERGENCY (or HAZARD) FLASHER		
 INTERIOR LIGHT	 HEADLIGHTS, trailer	 FRONT RUNNING LIGHTS, trailer	 SIDE RUNNING LIGHTS, trailer	 REAR RUNNING LIGHTS, trailer	 ASHTRAY
 CIGARETTE LIGHTER	 HORN	 TWO-TONE HORN	 RADIO	 RADIO (On-Off/Volume)	
 RADIO STATION SELECTOR	 AIR CONDITIONING	 HEATER	 HEATER (On-Off)	 HEATER REGULATOR	 FLOOR HEAT









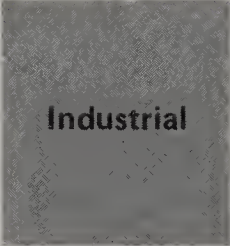





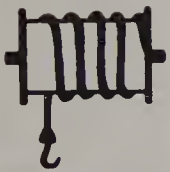
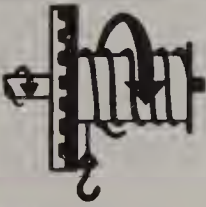
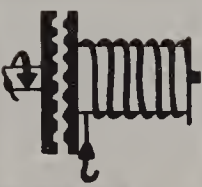







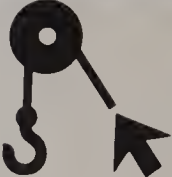










▲ Add to the symbol set as needed.

# VEHICLE CONTROLS *(continued)*

TEMPERATURE, HOT	TEMPERATURE, COLD	HEATING	COOLING		
VENTILATING FAN	CIRCULATING INSIDE AIR	CIRCULATING OUTSIDE AIR	WINDOWS, UP and DOWN	SLIDING ROOF	
WINDSHIELD WIPER	WINDSHIELD WASHER	WINDSHIELD WIPER / WASHER	WINDSHIELD DEFROSTER	HOOD RELEASE	
DAY POSITION (Rear View Mirror)	NIGHT POSITION (Rear View Mirror)	Lubrication	DIPSTICK	OIL	OIL PERIODICALLY with SAE 30
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
LUBRICATE every 1000 hours	LUBRICATE every 2000 hours	Agriculture	GROUND SPEED	ALL MECHANISMS	HEADER

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

















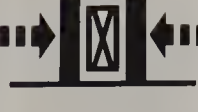







	 OR 		 OR 		
PLATFORM HEIGHT ▲	CONCAVE ADJUSTMENT ▲	REEL SPEED ▲	CUTTER BAR		
					
COTTON PICKING UNIT	COTTON PICKING UNIT LIFT, UP	COTTON PICKING UNIT LIFT, DOWN	COTTON BLOWING FAN	Industrial	DIFFERENTIAL LOCK
					
AXLE, CONNECT	AXLE, DISCONNECT	POWER TAKE-OFF (PTO), ON	POWER TAKE-OFF (PTO), OFF	GEAR 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
	 OR 				
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



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



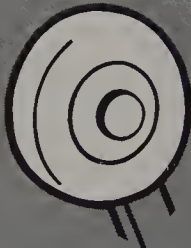
Supercharger



Mixture



Power (Throttle)



Landing Gear

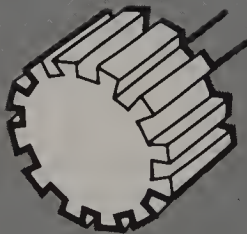
## Army Vehicle



Fuel System



Lighting System



Power Train

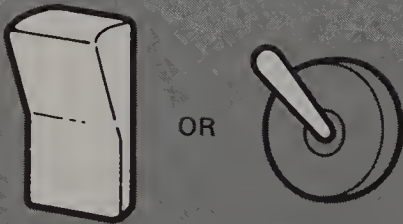
## Automotive



Finger-operated,  
continuous, multi-turn

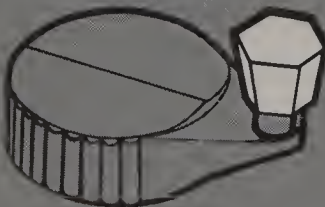


Detented  
(more than 2 steps)



2-Position  
(discrete switching only)

## Navy Radar



Bearing



Tuning



Gain



Dimmer

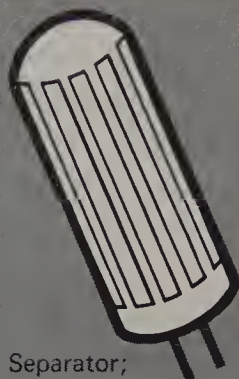




Auger



Ground Speed



Separator;  
Ratchet



RPM



Landing Flap



Carburetor Air



Reverse Power



Special Purpose  
Equipment



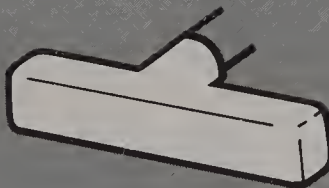
Ignition System



Accessory Equipment



Finger-operated,  
very light force



Push/Pull,  
heavy force



Slide Action,  
light force



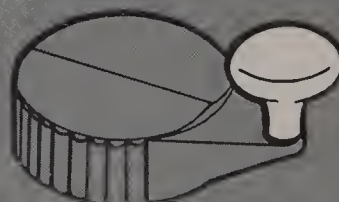
Intensity



Focus



Range



Marker













































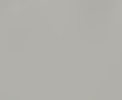








# GRAPHIC FORM SECTION

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.

							
p. 168	p. 175	p. 177	p. 182	p. 186	p. 190	p. 193	p. 198
							
							
							
							
							
							
							
							
							
							










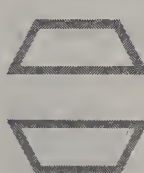













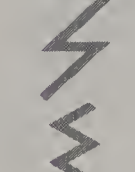








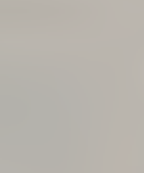




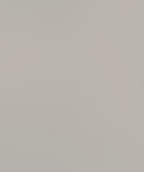




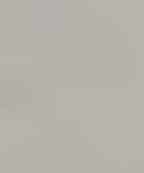













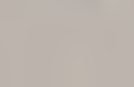

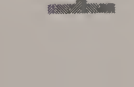


When a symbol is composed of several distinct forms, the complete symbol or its individual components are entered under each classification. However, when one form is clearly subordinated to another, only the major form is entered.

**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.


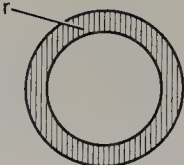




























When two or more symbols are basically similar in graphic form, differing only in relative size, line weight, or modification of their graphic components, we have illustrated only *one typical symbol* and have established the following guide:

- 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.

							
p. 199	p. 201	p. 203	p. 208	p. 215	p. 221	p. 224	p. 229
							
							
							
							
							
							
							
							
							
							
							
							
							

GRAPHIC FORM



		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	 Empty, 158
 Scattered Clouds, 0.2 or 0.3, 121 +	 Illuminated Exit Sign, 48 Ranger Station, 95 v		 Taoism, Yin-Yang, 139		 Scattered Clouds, 0.5, 121 + Contrast, 116 v	
 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		 Sunday, 89 Surviving Child with Seed of Life, 90 Radiation Quantities, 115	
 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
 Biennial, 56	 Core Service Adjacencies, 52	 Community Projects Two-Sided, 53	 Start and Stop, 107 Odd; Bit Information, 61	 Active Male Element, 89 To Switch On, 60 Start, 63 Saltpeter, 87 On, 115 Scattered Clouds, 0.1 or less, 121		



			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	Mistake, 60
Prohibition, 145	No Parking, 147	Not (Negation), 60 End of Prohibition, 147	Device Control, 59 + Time, 103 v	Vitriol, 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

GRAPHIC FORM


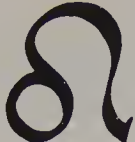
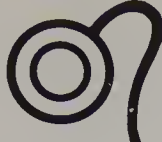





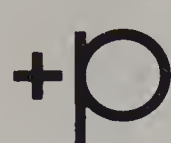









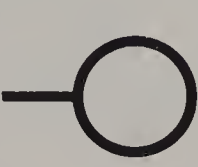
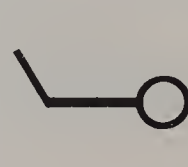


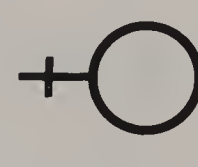



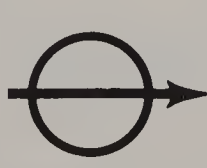





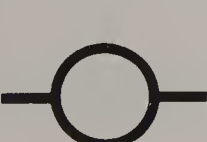






(continued)

	Airport, Civil or Military, 93				
	Machine Stop, 72 Stop, 63, 143 v				
	Letterspace, 72				
	Dangerous Disorder, 115				
	Single Outlet, Special-Purpose, 48 Duplex Outlet, Special-Purpose, 48 v				
	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 Information, 34				
	Snack Bar, 35				
	Quadder, 72 Electricity Meter, 49 v Radiation Quantities, 115 +				
	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				
	Golf, 132				
	Pulley, 128				
	Cobalt, 86 Knotter, 45 v Sal Alkali, 87 v				
	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				



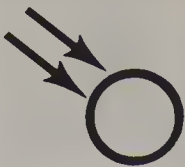
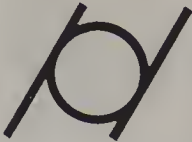


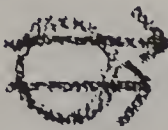

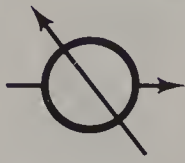








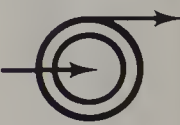













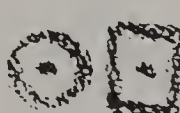


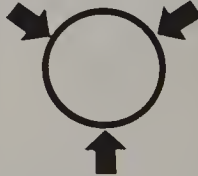














					
Pressure Storage Tank, 80	Leo, 54, 88	Sunflowers, 39 Artichoke, 40 v	Hoist Raised, 161 +	Particle Spin; Magnetic Dipole, 128	Ball Mill, 80
					Mercury, 54, 87 Neuter, 55 v Hermaphrodite (Monoclinous), 56 v Wednesday, 89 v
Microphone, 82	Microphone Socket, 63	Type, 64 +	Hand Brake Disengaged, 158 +		
	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			
Spring, 93				Through Control Zone, 151 Pump, Rotary and Centrifugal, 83 v	This Way, 90
	Direction Sign, Non-illuminated, 48 + No Use Going This Direction, 90 v				
			Project, 126 +	Feed, 63 + Remove, 63 v	Cystocarp, 56 Character Delete, 72 Good Road to Follow, 90 v Vertical Bed, 96 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





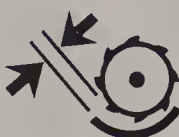

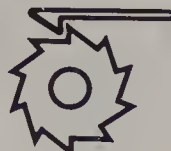















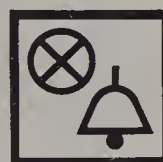











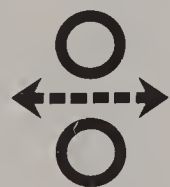


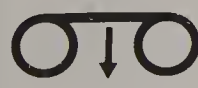

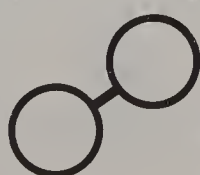




GRAPHIC FORM

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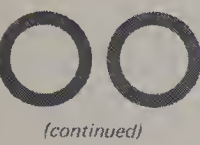











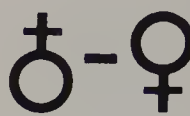
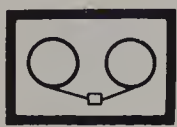

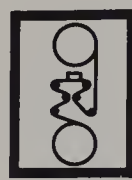






















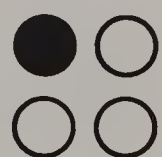






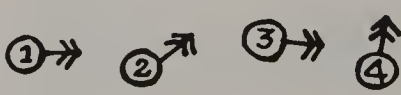


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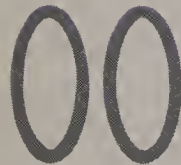


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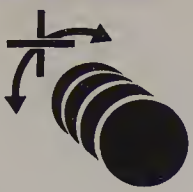





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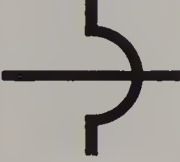





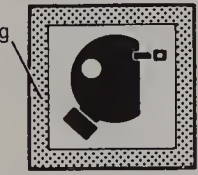
















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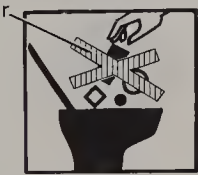
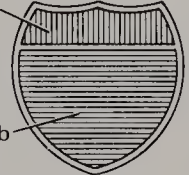


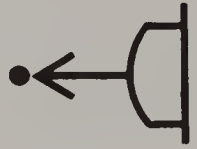




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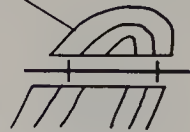







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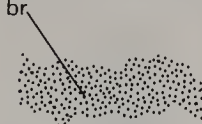





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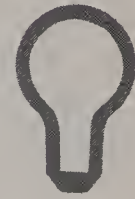
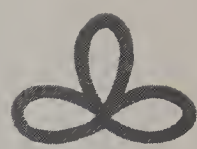
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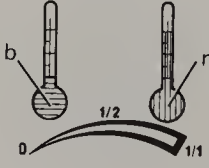



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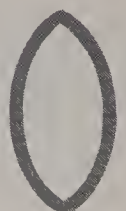


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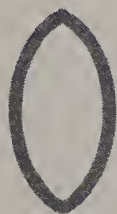
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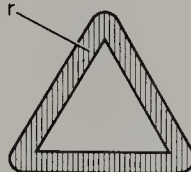
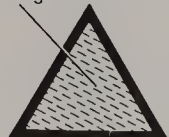






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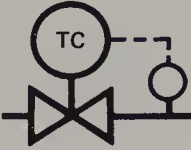


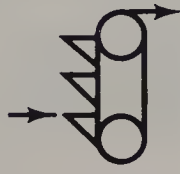





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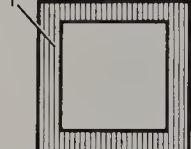
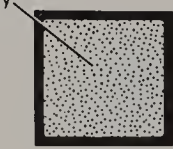
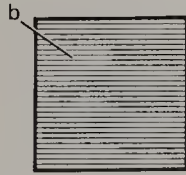
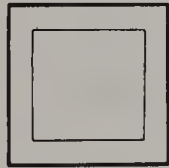



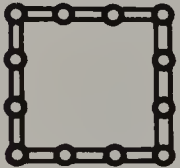









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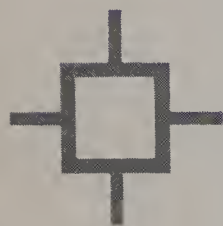
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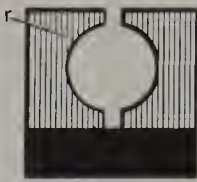
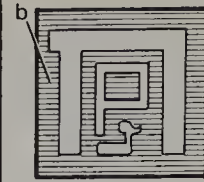


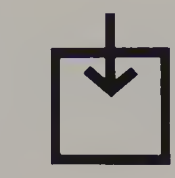





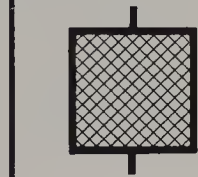
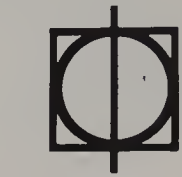
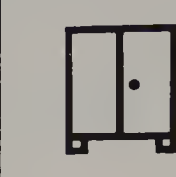
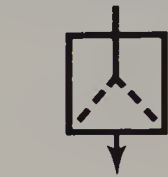

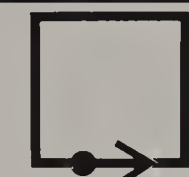
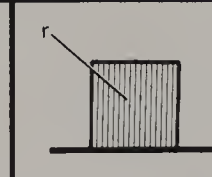



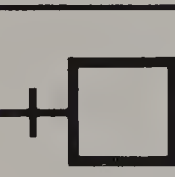
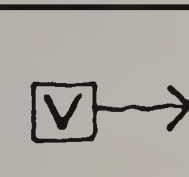
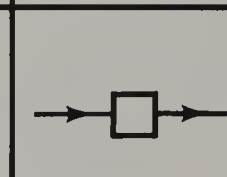
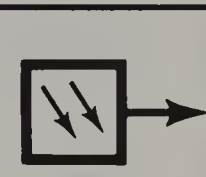
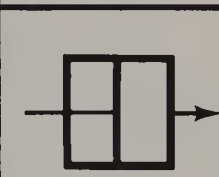
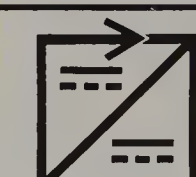

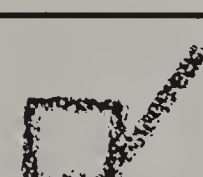

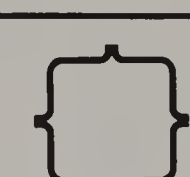
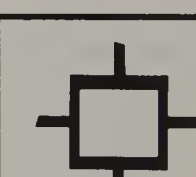
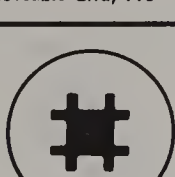

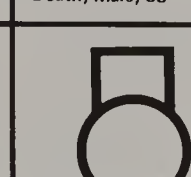
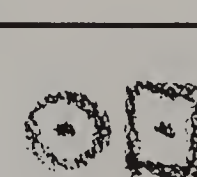
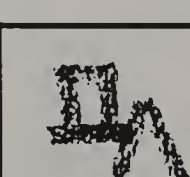
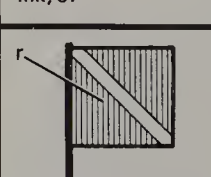
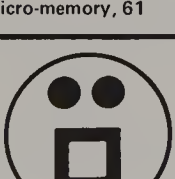
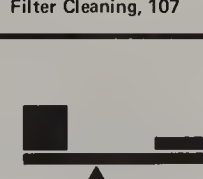
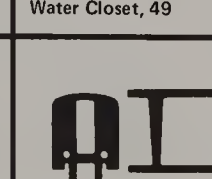

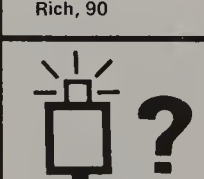
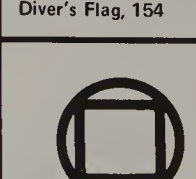




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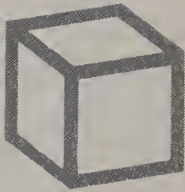
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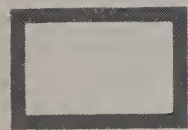
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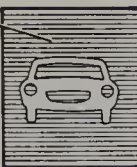
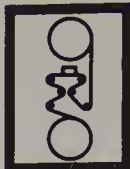


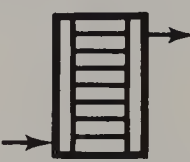
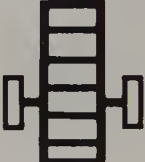









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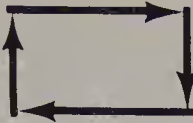


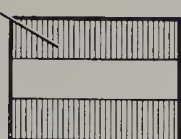


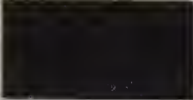
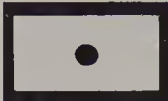
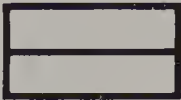
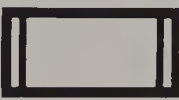
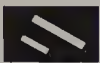



















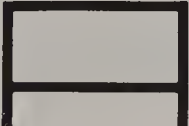




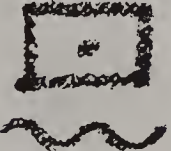




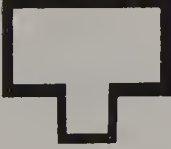

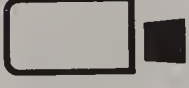





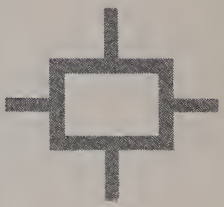
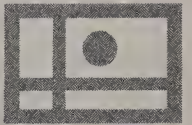
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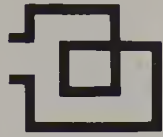



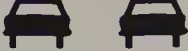


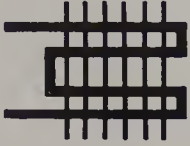

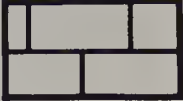


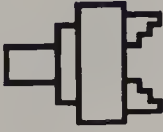

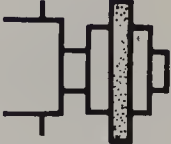


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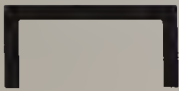



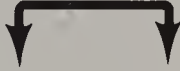














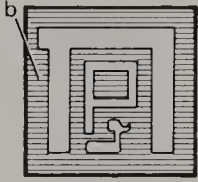


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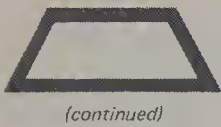



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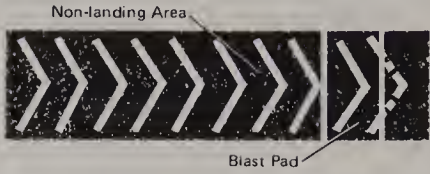






















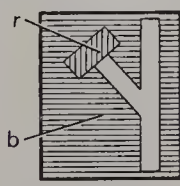





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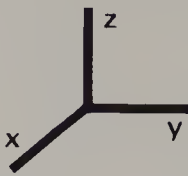


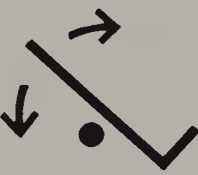




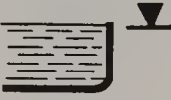






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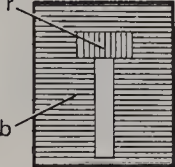


















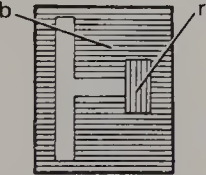





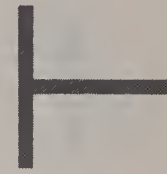
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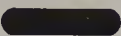
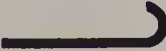
















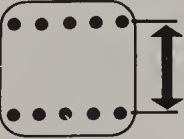
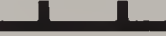











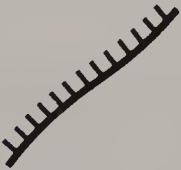




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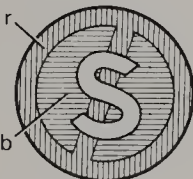
























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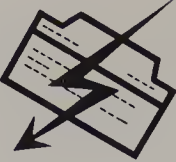



























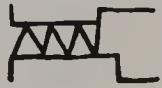


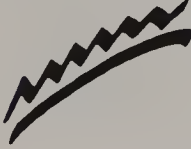











					
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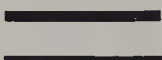
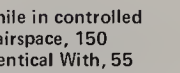
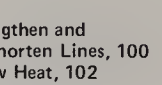


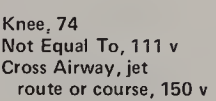
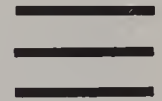
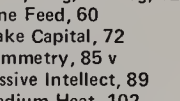
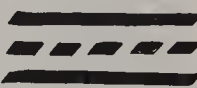






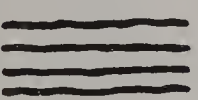
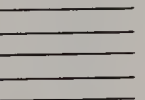





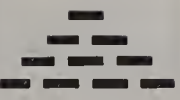
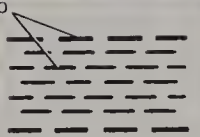





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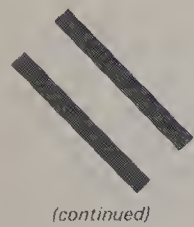
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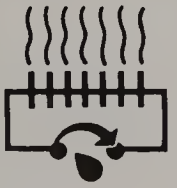






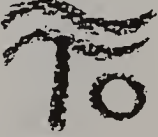









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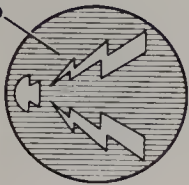





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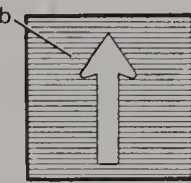
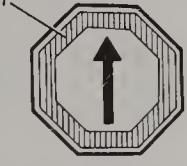



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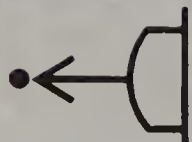
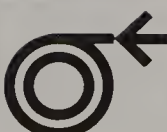
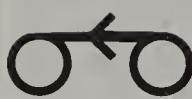
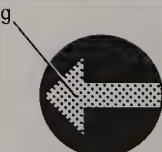



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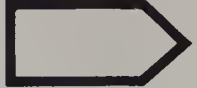







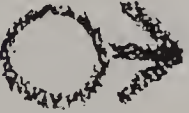



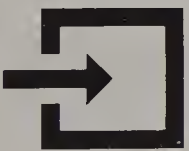



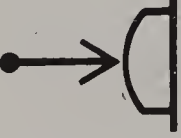
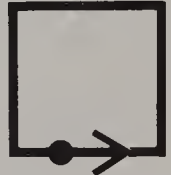

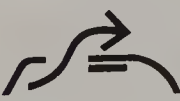










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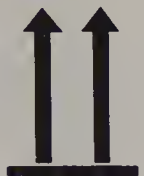


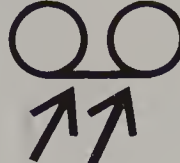
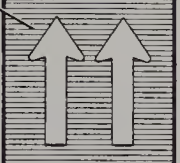
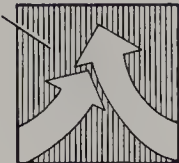
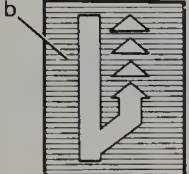























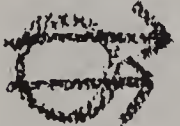










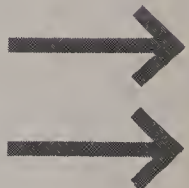
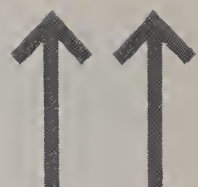
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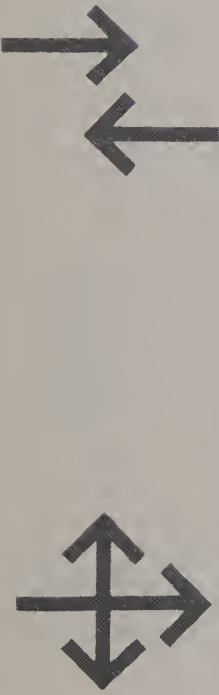
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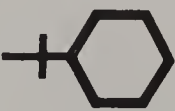













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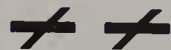

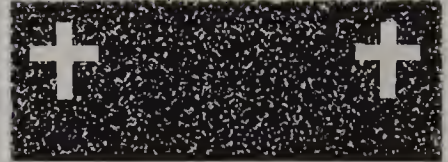






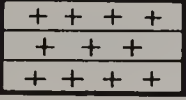





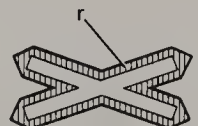







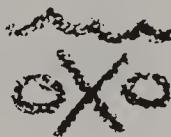





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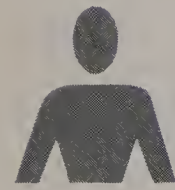


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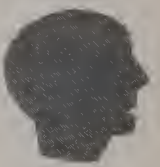
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# COLOR SECTION

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

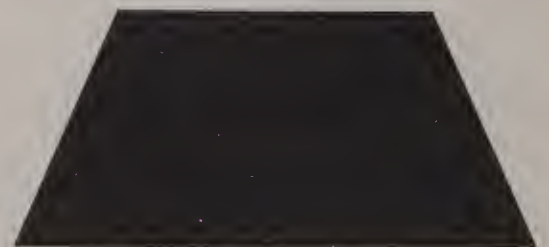
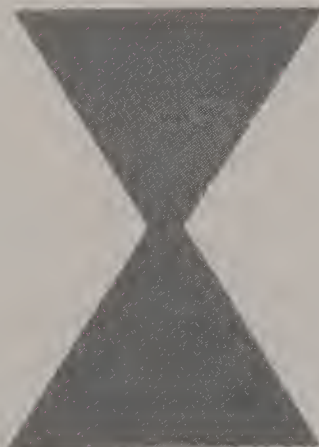
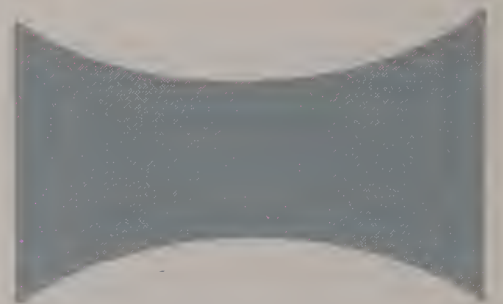
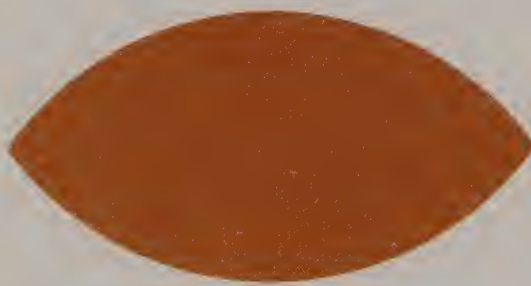
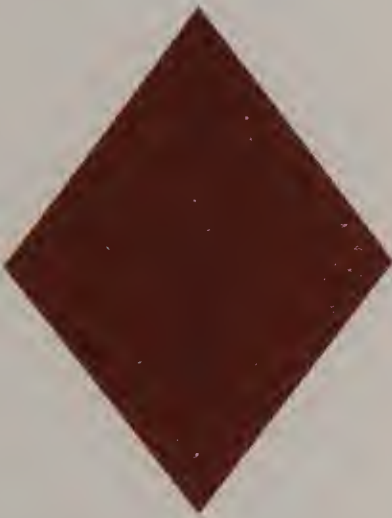
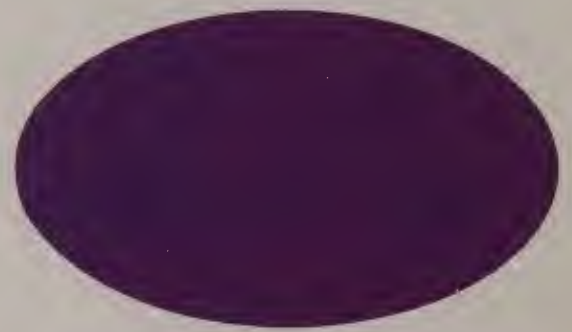
occupations — and a spectacular mobile mosaic results as the men climb about the girders.

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

### 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

### 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: Buddhistic  
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

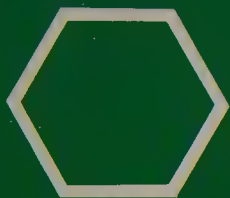
Temple of Nebuchadnezzar: Fourth level of building devoted to the Sun  
Early Zodiac: Sun, ruling Leo

### 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



## 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

C241→



## 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

C242→



## 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

C243→





GOLD



## POSITIVE ASSOCIATIONS

The earth

## NEGATIVE ASSOCIATIONS

Barrenness, poverty

## CULTURAL COMPARISONS

China: Sung Dynasty (960-1127A.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

## 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

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

C244→



### 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:

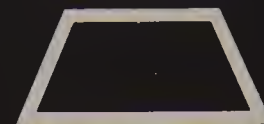
Kabbalah: Wisdom

### SAFETY

Gas-mask canisters (gray stripe):

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

C245→



### 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 A-quarius 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

C245→



## 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: Safe materials

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 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 Odysseus

## 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



**Piping:**  
**Nautical:** Steam



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

**ACKNOWLEDGMENTS**  
**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

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

NOTE: Symbols recommended by official standards institutes and associations are subject to revision or withdrawal at any time. Current information may be obtained by contacting the official group concerned.

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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 . . .)



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**HENRY DREYFUSS** has won worldwide acclaim for his pioneering role in shaping industrial design in the United States since 1930. His work in stage design—which made him famous at the age of 20—gave him keen insight into the tastes and needs of people. Putting this knowledge to a totally new kind of use, he opened his first industrial design office in 1929 in New York.

During the Depression, manufacturers for the first time actively sought out designers who could help sell goods and services by making them more attractive and efficient. This gave Henry Dreyfuss the opportunity to gain recognition as a leader in the field by reshaping products in ways that we take for granted today. These were pioneer designs which set the basic style in their fields, running the gamut of American Industry—Big Ben alarm clocks . . . John Deere farm machinery . . . Hoover vacuum cleaners . . . New York Central's 20th Century Limited . . . Bell Laboratories' telephones . . . the ocean liners *Independence* and *Constitution* . . . Polaroid cameras . . . American Airlines' plane interiors . . . layout designs for *Time*, *Reader's Digest*, and *McCalls* . . . the Bankers Trust building . . . and many more projects both large and small.

In 1969 he relinquished command of his industrial design firm in order to devote himself to a new career as Corporate Advisor. His clients include: American Airlines, AT&T, Deere & Company, Hallmark Cards Incorporated, and the Polaroid Corporation. He is also author of **DESIGNING FOR PEOPLE** and **THE MEASURE OF MAN**.

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