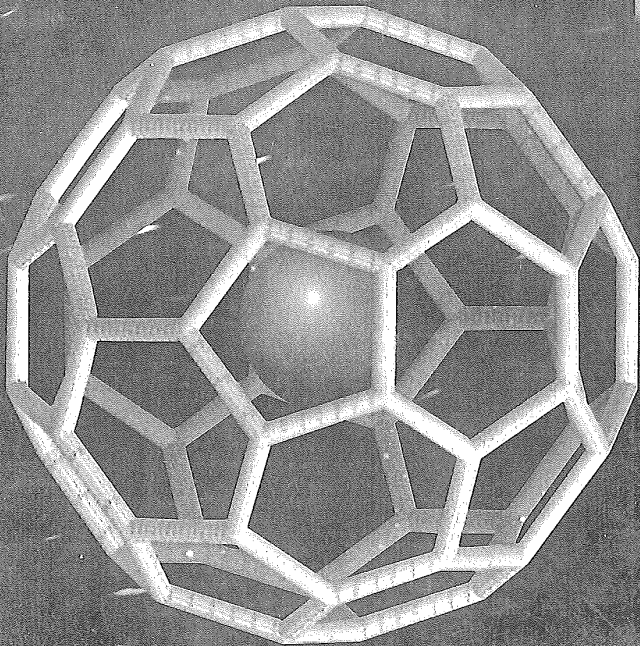


McGraw-Hill  
Dictionary of  
**SCIENTIFIC**  
and  
**TECHNICAL**  
**TERMS**



Sixth Edition



# **McGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS**

**Sixth  
Edition**

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**On the cover: Representation of a fullerene molecule with a noble gas atom trapped inside. At the Permian-Triassic sedimentary boundary the noble gases helium and argon have been found trapped inside fullerenes. They exhibit isotope ratios quite similar to those found in meteorites, suggesting that a fireball meteorite or asteroid exploded when it hit the Earth, causing major changes in the environment. (Image copyright © Dr. Luann Becker. Reproduced with permission.)**

Over the six editions of the Dictionary, material has been drawn from the following references: G. M. Garrity et al., *Taxonomic Outline of the Prokaryotes*, Release 2, Springer-Verlag, January 2002; D. W. Linzey, *Vertebrate Biology*, McGraw-Hill, 2001; J. A. Pechenik, *Biology of the Invertebrates*, 4th ed., McGraw-Hill, 2000; *U.S. Air Force Glossary of Standardized Terms*, AF Manual 11-1, vol. 1, 1972; F. Casey, ed., *Compilation of Terms in Information Sciences Technology*, Federal Council for Science and Technology, 1970; *Communications-Electronics Terminology*, AF Manual 11-1, vol. 3, 1970; P. W. Thrush, comp. and ed., *A Dictionary of Mining, Mineral, and Related Terms*, Bureau of Mines, 1968; *A DOD Glossary of Mapping, Charting and Geodetic Terms*, Department of Defense, 1967; J. M. Gilliland, *Solar-Terrestrial Physics: A Glossary of Terms and Abbreviations*, Royal Aircraft Establishment Technical Report 67158, 1967; W. H. Allen, ed., *Dictionary of Technical Terms for Aerospace Use*, National Aeronautics and Space Administration, 1965; *Glossary of Stinfo Terminology*, Office of Aerospace Research, U.S. Air Force, 1963; *Naval Dictionary of Electronic, Technical, and Imperative Terms*, Bureau of Naval Personnel, 1962; R. E. Huschke, *Glossary of Meteorology*, American Meteorological Society, 1959; *ADP Glossary*, Department of the Navy, NAVSO P-3097; *Glossary of Air Traffic Control Terms*, Federal Aviation Agency; *A Glossary of Range Terminology, White Sands Missile Range, New Mexico*, National Bureau of Standards, AD 467-424; *Nuclear Terms: A Glossary*, 2d ed., Atomic Energy Commission.

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such a film. **2.** A local crater in a metal surface due to accidental contact with the welding electrode. [ORD] Concerted air attack on a single objective. { 'stri:k }  
**strike board** [MIN ENG] A board at the top of a shaft from which the bucket is tipped; used in shaft sinking; formerly, the beam or plank at the shaft top on which the baskets were landed. Also known as strike tree. { 'stri:k ,bɔ:d }  
**strike fault** [GEOL] A fault whose strike is parallel with that of the strata involved. { 'stri:k ,fɔlt }  
**strike force** [ORD] A force composed of appropriate units necessary to conduct strikes, attack, or assault operations. { 'stri:k ,fɔrs }  
**strike joint** [GEOL] A joint that strikes parallel to the bedding or cleavage of the constituent rock. { 'stri:k ,dʒɔint }  
**strike note** [ACOUS] The note which is the loudest heard when a bell is struck, and whose pitch is generally assigned to the bell. { 'stri:k ,nɔt }  
**strike-off board** [ENG] A straight-edge board used to remove excess, freshly placed plaster, concrete, or mortar from a surface. { 'stri:k ,ɔf ,bɔ:d }  
**strike photography** [GRAPHICS] Air photographs taken during an air strike. { 'stri:k fə,tæg,rə:fē }  
**strike plate** [DES ENG] A metal plate or box which is set in a door jamb and is either pierced or recessed to receive the bolt or latch of a lock. { 'stri:k ,plæt }  
**strike plating** [MET] Applying a thin electroplated film prior to depositing the principal electroplate. { 'stri:k ,plæd-ɪŋ }  
**striker** [ORD] A firing pin or a projection on the hammer of a firearm, which strikes the primer to initiate a propelling charge explosive train or a fuse explosive train. { ,stri:kər }  
**striker plate** [ORD] A plate in the breech of a firearm or gun, which supports the base of the cartridge and which is pierced with a hole through which the striker or firing pin hits the primer. { ,stri:kər ,plæt }  
**strike separation** [GEOL] The distance of separation on either side of a fault surface of two formerly adjacent beds. { 'stri:k ,sep-ə,ræ:ʃən }  
**strike-separation fault** See lateral fault. { 'stri:k ,sep-ə,ræ:ʃən ,fɔlt }  
**strike-slip fault** See strike-slip fault. { 'stri:k |ʃift ,fɔlt }  
**strike slip** [GEOL] The component of the slip of a fault that is parallel to the strike of the fault. Also known as horizontal displacement; horizontal separation. { 'stri:k ,slɪp }  
**strike-slip fault** [GEOL] A fault whose direction of movement is parallel to the strike of the fault. Also known as strike-slip fault. { 'stri:k |slɪp ,fɔlt }  
**strike stream** See subsequent stream. { 'stri:k ,strēm }  
**strike-through** See bleed-through; show-through. { 'stri:k ,θru: }  
**strike tree** See strike board. { 'stri:k ,tri: }  
**striking hammer** [ENG] A hammer used to strike a rock drill. { 'stri:k-ɪŋ ,hæm-ər }  
**striking potential** [ELECTR] **1.** Voltage required to start an electric arc. **2.** Smallest grid-cathode potential value at which plate current begins flowing in a gas-filled triode. { 'stri:k-ɪŋ pə,tentʃəl }  
**striking velocity** See impact velocity. { 'stri:k-ɪŋ və,læs-əd-ē }  
**string** [COMPUT SCI] A set of consecutive, adjacent items of similar type; normally a bit string or a character string. [ENG] A piece of pipe, casing, or other down-hole drilling equipment coupled together and lowered into a borehole. [GEOL] A very small vein, either independent or occurring as a branch of a larger vein. Also known as stringer. [MATH] One of the space curves that form a braid. [MECH] A solid body whose length is many times as large as any of its cross-sectional dimensions, and which has no stiffness. [PART PHYS] A proposed structure for elementary particles, consisting of a one-dimensional curve with zero thickness and length typically of the order of the Planck length,  $10^{-35}$  m. { 'striŋ }  
**string bead** [MET] A continuous weld bead made without appreciable transverse oscillation. { 'striŋ ,bi:d }  
**string break** [COMPUT SCI] In the sorting of records, the situation that arises when there are no records having keys with values greater than the highest key already written in the sequence of records currently being processed. { 'striŋ ,bræk }  
**string constant** [COMPUT SCI] An arbitrary combination of letters, digits, and other symbols that is treated in a manner completely analogous to numeric constants. { 'striŋ ,kən-stənt }

**stringcourse** [BUILD] A horizontal band of masonry, generally narrower than other courses and sometimes projecting, extending across the facade of a structure and in some instances encircling pillars or engaged columns. Also known as belt course. { 'striŋ ,kɔ:rs }  
**string duality** [PART PHYS] The property of superstring theories that the strongly coupled behavior of each theory appears to be equivalent to that of some other weakly coupled system, and all the seemingly different superstring theories, as well as M-theory, are just different weakly coupled limits of a single theory. { 'striŋ dʉ'al-əd-ē }  
**string editor** See stream editor. { 'striŋ ,ed-əd-ər }  
**string electrometer** [ENG] An electrometer in which a conducting fiber is stretched midway between two oppositely charged metal plates; the electrostatic field between the plates displaces the fiber laterally in proportion to the voltage between the plates. { 'striŋ ,i,lek'træm-əd-ər }  
**stringer** [CIV ENG] **1.** A long horizontal member used to support a floor or to connect uprights in a frame. **2.** An inclined member supporting the treads and risers of a staircase. [GEOL] See string. [MET] An elongated mass of microconstituents or foreign material in wrought metal oriented in the direction of working. { 'striŋ-ər }  
**stringer lode** [GEOL] A lode that consists of many narrow veins in a mass of country rock. { 'striŋ-ər ,ləd }  
**stringer plate** [NAV ARCH] One of the plates that make up the outer strake of the deck of a ship, and which are usually heavier than those making up the rest of the deck. { 'striŋ-ər ,plæt }  
**string galvanometer** [ENG] A galvanometer consisting of a silver-plated quartz fiber under tension in a magnetic field, used to measure oscillating currents. Also known as Einthoven galvanometer. { 'striŋ ,gal-və'næm-əd-ər }  
**stringing** [PETRO ENG] The connecting of lengths of pipe end to end (tubing or casing) to make a string long enough to reach to the desired depth in a well bore. { 'striŋ-ɪŋ }  
**string manipulation** [COMPUT SCI] The handling of strings of characters in a computer storage as though they were single units of data. { 'striŋ mænɪp-ye,læ:ʃən }  
**string manipulation language** See string processing language. { 'striŋ mænɪp-ye,læ:ʃən ,læŋ'gwɪj }  
**string milling** [MECH ENG] A milling method in which parts are placed in a row and milled consecutively. { 'striŋ ,mil-ɪŋ }  
**String-Oriented-Symbolic Language** See SNOBOL. { 'striŋ 'dɔ:ent-əd sim'bɔ:l-ɪk ,læŋ'gwɪj }  
**string processing language** [COMPUT SCI] A higher-level programming language equipped with facilities to synthesize and decompose character strings, search them in response to arbitrarily complex criteria, and perform a variety of other manipulations. Also known as string manipulation language. { 'striŋ 'præs-es-ɪŋ ,læŋ'gwɪj }  
**string shot** [PETRO ENG] An oil-well stimulation technique in which a string of explosive (for example, Prima Cord) is hung opposite to the producing zone down a wellbore and detonated; used to remove deposits (gypsum, mud, or paraffin) from the formation face. { 'striŋ ,ʃhɑt }  
**stringy floppy** [COMPUT SCI] A peripheral storage device for microcomputers that uses a removable magnetic tape cartridge with a 1/16-inch-wide (1.5875-millimeter) loop of magnetic tape. { 'striŋ-ē 'flɒp-ē }  
**strip** [ENG] **1.** To remove insulation from a wire. **2.** To break or otherwise damage the threads of a nut or bolt. [MATER] A long, narrow piece of rigid material of uniform width. [MIN ENG] To remove coal, stone, or other material from a quarry or from a working that is near the surface of the earth. [ORD] To disassemble a piece of equipment, such as a gun, in order to clean, repair, or transport it. { 'stri:p }  
**strip-borer drill** [MECH ENG] An electric or diesel skid- or caterpillar-mounted drill used at quarry or opencast sites to drill 3- to 6-inch-diameter (8- to 15-centimeter), horizontal blast holes up to 100 feet (30 meters) in length, without the use of flush water. { 'stri:p ,bɔr-ər ,drɪl }  
**strip-chart recorder** [ENG] A recorder in which one or more writing pens or other recording devices trace changes in a measured variable on the surface of a strip chart that is moved at constant speed by a time-clock motor. { 'stri:p ,çɑ:rt ri,kɔrd-ər }  
**strip-cropping** [AGR] Growing separate crops in adjacent