

On the cover: Photograph of crystals of Vitamin B₁₂
(Grazia Kunkel, University of Hawaii)

McGraw-Hill Dictionary of Scientific and Technical Terms Fifth Edition

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(Dennis Kunkel, University of Hawaii)

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$K(A)$, the Grothendieck group of A . { 'al-jə,'brä-ik 'kä ,thə-ə-rē }

algebraic language [MATH] The conventional method of writing the symbols, parentheses, and other signs of formulas and mathematical expressions. { 'al-jə,'brä-ik 'laŋ-gwɪj }

algebraic manipulation language [COMPUT SCI] A programming language used in the solution of analytic problems by symbolic computation. { 'al-jə,'brä-ik mə-ni-pyə-'lā-shən ,laŋ-gwɪj }

algebraic number [MATH] Any root of a polynomial with rational coefficients. { 'al-jə,'brä-ik 'nəm-bər }

algebraic number field [MATH] A finite extension field of the field of rational numbers. { 'al-jə,'brä-ik 'nəm-bər ,fēld }

algebraic number theory [MATH] The study of properties of real numbers, especially integers, using the methods of abstract algebra. { 'al-jə,'brä-ik 'nəm-bər ,thə-ə-rē }

algebraic object [MATH] Either an algebraic structure, such as a group, ring, or field, or an element of such an algebraic structure. { 'al-jə,'brä-ik 'əb-jekt }

algebraic operation [MATH] Any of the operations of addition, subtraction, multiplication, division, raising to a power, or extraction of roots. { 'al-jə,'brä-ik ,əp-ə-'rā-shən }

algebraic scattering theory [PHYS] An approach to the analysis of reactions between composite particles in which the fundamental role is played by the scattering matrix, which is obtained algebraically, without the use of a wave equation, by using the concept of dynamic symmetry. { 'al-jə,'brä-ik 'skad-ə-rɪŋ ,thə-ə-rē }

algebraic set [MATH] A set made up of all zeros of some specified set of polynomials in n variables with coefficients in a specified field F , in a specified extension field of F . { 'al-jə,'brä-ik 'set }

algebraic sum [MATH] 1. The result of the addition of two or more quantities, with the addition of a negative quantity equivalent to subtraction of the corresponding positive quantity. 2. For two fuzzy sets A and B , with membership functions m_A and m_B , that fuzzy set whose membership function m_{A+B} satisfies the equation $m_{A+B}(x) = m_A(x) + m_B(x) - [m_A(x) \cdot m_B(x)]$ for every element x . { 'al-jə,'brä-ik 'səm }

algebraic surface [MATH] A subset S of a complex n -space which consists of the set of complex solutions of a system of polynomial equations in n variables such that S is a complex two-manifold in the neighborhood of most of its points. { 'al-jə,'brä-ik 'sərfəs }

algebraic symbol [MATH] A letter that represents a number or a symbol indicating an algebraic operation. { 'al-jə,'brä-ik 'sɪm-bəl }

algebraic term [MATH] In an expression, a term that contains only numbers and algebraic symbols. { 'al-jə,'brä-ik 'tərm }

algebraic topology [MATH] The study of topological properties of figures using the methods of abstract algebra; includes homotopy theory, homology theory, and cohomology theory. { 'al-jə,'brä-ik tə-'päl-ə-jē }

algebra of subsets [MATH] An algebra of subsets of a set S is a family of subsets of S that contains the null set, the complement (relative to S) of each of its members, and the union of any two of its members. { 'al-jə-'brə əv 'səb ,sets }

algebra with identity [MATH] An algebra which has an element, not equal to 0 and denoted by 1, such that, for any element x in the algebra, $x1 = 1x = x$. { 'al-jə-'brə wɪθ 'ɪ-den-ə-tē }

algid malaria See falciparum malaria. { 'al-jəd mə-'ler-ē-ə }

Algenib [ASTRON] A star in the constellation Pegasus. { 'al-'jen-əb }

Algerian onyx See onyx marble. { 'al-'jer-ē-ən 'æn-ɪks }

algnesia [PHYSIO] Sensitivity to pain. { 'al-'jēz-ē-ə }

algismeter [PHYSIO] A device used to determine pain thresholds. { 'al-jə-'sɪm-əd-ər }

algesroreceptor [PHYSIO] A pain-sensitive cutaneous sense organ. { 'al-jə-'sɪr-rō-'nɪ ,sep-tər }

algicide [MATER] A chemical used to kill algae. { 'al-jə,'sɪd }

algin [MATER] A hydrophilic polysaccharide extracted from brown algae, such as giant kelp. [ORG CHEM] See sodium alginate. { 'al-'jɒn }

alginite [BOT] An algal polysaccharide that is a major constituent of the cell walls of brown algae. { 'al-jə,'nɪt }

alginic acid [ORG CHEM] $(C_6H_7O_6)_n$ An insoluble colloidal acid obtained from brown marine algae; it is hard when dry and absorbent when moist. Also known as algin. { 'al-'jɪn-ɪk 'as-əd }

alginic acid sodium salt See sodium alginate. { 'al-'jɪn-ɪk 'as-əd 'sɒd-ē-əm 'sɒlt }

alginite See alginite. { 'al-jə,'nɪt }

alglite [PETR] The petrological unit that constitutes algal material present in considerable amounts in algal or boghead coal. Also known as alginite. { 'al-'jɪt }

algonolite [MINERAL] Cu_6As A steel gray to silver white mineral consisting of copper arsenide and occurring as minute hexagonal crystals or in massive and granular form. { 'al-'gɒl-ə,'nɪt }

Algol [ASTRON] An eclipsing variable star of spectral classification B8 in the constellation Perseus; the star β Persei. Also known as Demon Star. [COMPUT SCI] An algorithmic and procedure-oriented computer language used principally in the programming of scientific problems. { 'al-'gɒl }

algology [BOT] The study of algae. Also known as phycology. { 'al-'gɒl-ə-'jɪ }

Algol symbiotic [ASTRON] A symbiotic star consisting of a red giant, a main-sequence star, and an accretion disk of gas from the red giant that forms around the main-sequence star and is heated by it. { 'al-'gɒl ,sɪm-'bɪ-əd-ɪk }

Algonian orogeny [GEOL] Orogenic episode affecting Archean rocks of Canada about 2.4 billion years ago. Also known as Kenoran orogeny. { 'al-'gɒm-ən ɔ-'rɒj-ə-nē }

algometer [MED] An instrument for measuring pressure stimuli which produce pain. { 'al-'gæ-'mɒd-ər }

Algonkian [GEOL] Geologic time between the Archean and Paleozoic. Also known as Proterozoic. { 'al-'gɒŋ-'kē-ən }

algophage See cyanophage. { 'al-'gə,'fəj }

algorphobia [PSYCH] Abnormal fear of pain. { 'al-'gə-'fɒb-ē-ə }

algorithm [MATH] A set of well-defined rules for the solution of a problem in a finite number of steps. { 'al-'gə,'rɪθ-əm }

algorithmic error [COMPUT SCI] An error in computer processing resulting from imprecision in the method used to carry out mathematical computations, usually associated with either rounding or truncation of numbers. { 'al-'gə,'rɪθ-'mɪk 'er-ər }

algorithmic language [COMPUT SCI] A language in which a procedure or scheme of calculations can be expressed accurately. { 'al-'gə,'rɪθ-'mɪk 'laŋ-gwɪj }

algorithm translation [COMPUT SCI] A step-by-step computerized method of translating one programming language into another programming language. { 'al-'gə,'rɪθ-əm tranz-'lɪk-shən }

algor mortis [PATH] Postmortem cooling of the body. { 'al-'gər ,mɔrtəs }

alias [COMPUT SCI] 1. An alternative entry point in a computer subroutine at which its execution may begin, if so instructed by another routine. 2. An alternative name for a file or device. [STAT] Either of two effects in a factorial experiment which cannot be differentiated from each other on the basis of the experiment. { 'æ-'li-əs }

aliasing [COMPUT SCI] In computer graphics, the jagged appearance of diagonal lines on printouts and on video monitors. [MATH] Introduction of error into the computed amplitudes of the lower frequencies in a Fourier analysis of a function carried out using discrete time samplings whose interval does not allow the proper analysis of the higher frequencies present in the analyzed function. { 'æ-'li-əs-ɪŋ }

alicyclic [ORG CHEM] 1. Having the properties of both aliphatic and cyclic substances. 2. Referring to a class of saturated hydrocarbon compounds whose structures contain one ring. Also known as cycloaliphatic; cycloalkane. 3. Any one of the compounds of the alicyclic class. Also known as cyclane. { 'æ-'sɪ-'kɪk-ɪk }

alldade [ENG] 1. An instrument for topographic surveying and mapping by the plane-table method. 2. Any sighting device employed for angular measurement. { 'al-'ə,dæd }

alien substitution [GEN] The replacement of one or more chromosomes by those from a different species. { 'æ-'li-ən ,səb-stə-'tʃʊ-shən }

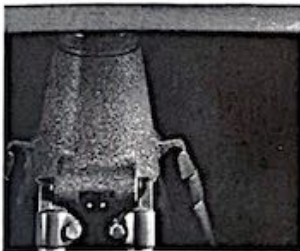
allesterase [BIOCHEM] Any one of the lipases or nonspecific esterases. { 'al-'ē-'es-tə,'ræs }

aligning drift [MECH ENG] A rod or bar that is used for aligning parts during assembly. { 'ə-'lɪn-ɪŋ ,drɪft }

alignment [ARCHEO] An arrangement of a single row or of multiple rows of standing stones at a sites formerly occupied by humans. [CIV ENG] In a survey for a highway, railroad, or similar installation, a ground plan that shows the horizontal

ALCYONADA

ALIDADE



A surveying alidade, having a telescope with attached graduated vertical circle, mounted on a flat base that can be moved about the table. (Kern Instruments, Inc.)