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factor, *n.*

Pronunciation: Brit. /'faktə/, U.S. /'fæktər/

Forms: I ME **factowre**, I ME **facture**, I ME–18 **factour**, I ME– **factor**, 15 **factore**, 15 ...

Frequency (in current use):

Origin: Of multiple origins. Partly a borrowing from French. Partly a borrowing from Latin. **Etymons:** French *factor*; Latin *factor*.

Etymology: < (i) Anglo-Norman *factor*, *factour*, Middle French *facteur* (French *facteur* ...

I. A person or business.

* An agent for another.

1. *Business and Finance.*

a. An agent who buys and sells, or transacts other business, on behalf of another person or company, usually one based in a different place, on commission; a mercantile agent; a commission agent.

butter, cheese, cloth, horse, malt, timber, wool factor, etc.: see the first element. See also CORNFACTOR *n.*

In later use a factor is often distinguished from an ordinary agent or broker in having actual possession of the goods he or she deals in, and trading in his or her own name.

- 1432 *Petition* (P.R.O.) 104.5183 (*MED*) The factours and the attournes of the seide suppliantz.
- c1503 (▶1491) *Indenture* in R. Arnold *Chron.* f. xl/1 Shall ressayue the said v C frankz of y^e said I. de castro and alonso or of any of them or of theyr factors.
- 1523 *Act 14 & 15 Hen. VIII* c. 1 No person..shall sell..to any marchaunt..or to any of his..factours..any maner of brode white wollen clothes.
- c1592 MARLOWE *Jew of Malta* I. i Bid my factor bring his loading in.
- 1607 R. C. tr. H. Estienne *World of Wonders* II. xxvii. 297 The merchant and factor for these Aromaticke drugs, spices and confects, is my Lord Saint Paul.
- 1683 *London Gaz.* No. 1852/8 A Factor..for Norwich Hose or Stockings.
- 1727 A. HAMILTON *New Acct. E. Indies* I. x. 113 Send Factors all over India to carry on trade.
- 1796 A. DIROM *Inq. into Corn Laws & Corn Trade Great Brit.* ii. 69 Honest and substantial persons.., being neither merchants nor factors for the importing of corn.
- 1850 W. IRVING *Mahomet & his Successors* I. v. 49 Mahomet..was employed by different persons as..factor in caravan journeys to Syria.
- 1892 W. S. WALSH *Handy-bk. Lit. Curiosities* 447 The story of a Virginia planter..who wrote to his factor in England to send him two virtuous young women.
- 1954 G. OHLIN tr. E. F. Heckscher *Econ. Hist. Sweden* vi. 246 The merchants could now hand over the task of transportation.., while previously they or their factors had staked lives and fortunes on the delivery of goods.

2010 D. L. BRADY *Essent. Internat. Marketing* xi. 193 A foreign factor is a type of agent that sells consigned or delivered merchandise for a commission known as factorage.

b. An East India Company employee managing a trading post. Now *hist.*

Early examples are probably contextual uses of sense 1a.

- 1600 *Minutes Court Adventurers* 23 Oct. in *Cal. State Papers: E. Indies* (1862) 109 Thos. Wasse to be employed as factor.
- 1600 *Minutes Court Adventurers* 18 Nov. in *Cal. State Papers: E. Indies* (1862) 111 Three principal factors to have each 100*l.* for equipment..four of the second sort to be allowed 50*l.*..four of the third sort 50*l.*..and four of the fourth and last sort 20*l.* each.
- 1611 *E. India Co. Comm.* 4 Apr. in A. Farrington *Eng. Factory in Japan* (1991) II. 980 Such of the factors as shall remaine in the shippes..shall be ymployed to..pay the money & keepe due accompte thereof.
- 1654 *Citie Matrons* 4 I took up a Factor of the East Indies, that had cozened the Company of much Gold, Jewells, and Druggs, which I made him cast away freely in the Pleasures of this City.
- 1675 *Let.* 12 July in J. Bruce *Ann. East-India Co.* (1810) II. 375 We do order, that..when the Writers have served their times, they be stiled Factors.
- 1766 R. STEVENS *Compl. Guide East-India Trade* (title-page) Addressed to all commanders, officers, factors, &c. in the Honourable East-India Company's Service.
- 1781 LD. CORNWALLIS *Corr.* (1859) I. 378 We..have a council and senior and junior merchants, factors and writers, to load one ship in the year.
- 1800 DUKE OF WELLINGTON in Marquess Wellesley *Select. Despatches* (1877) 719 Writers or factors filling the stations of registers.
- 1897 R. W. FRAZER *Brit. India* xvi. 369 These Covenanted Civilians are the successors of the former writers or factors appointed and sent out by the East India Company.
- 1993 S. C. GHOSH in J. A. Mangan *Imperial Curriculum* xi. 175 Below the Governor's Council came the senior and junior merchants, the factors and the writers.

c. *Brit.* In Birmingham and Sheffield: a trader commissioning work or buying goods from an independent maker of hardware, with the finished article usually bearing the factor's trademark rather than that of the maker. Cf. LITTLE MASTER *n.* 3. Now *hist.*

- 1833 J. HOLLAND *Treat. Manuf. Metal* II. 13 The operatives pressed between reduced prices and want of work, betook themselves to the factors. The factor..advanced to the workman a small sum to purchase the requisite tools.
- 1914 *Econ. Jrnl.* 24 274 By the side of the large factory-owner..we find the 'little master'..making goods on his own account and hawking them at markets or selling them to factors.
- 1987 N. THRIFT in N. Thrift & P. Williams *Class & Space* i. ii. 35 'Little masters', artisans who had begun to purchase their own raw materials and employed a few apprentices, and 'factors', middlemen who took on work and then contracted it out again.

d. A person or agency that takes over and collects debts owed to other (esp. finance) companies.

- 1925 *Shoyer v. Wright-Ginsberg Co.* in *N.Y. State Reporter* **240** 231 The defendant insists that although the definition adopted by us may have been the original and ordinary meaning of the word 'factor', such definition has yielded to later commercial and trade usages... The meaning which defendant says has been thus given to the word is that of a person who merely advances money on goods consigned to him or on accounts receivable transferred to him and who thus becomes simply a commercial banker making loans on certain securities.
- 1936 J. C. BAKER & D. W. MALOTT *Introd. Corporate Finance* VIII. iii. 331 The representative of a factor..suggested that Mr. Ernst contract with his concern for the financing of the Parisian Silk Company's working capital requirements.
- 1965 L. K. BRANDT *Business Finance* xi. 221 Factors are even more *commercial* in their activities than the finance companies discussed above.
- 1991 *Daily Tel.* 19 Feb. 30/3 Another customer asked the factors to give him three months' grace.

2.

a. gen. A person who acts for another; an agent, deputy, or representative. Now chiefly *hist.*

- 1445 in *Hist. MSS Comm.: 14th Rep.: App. Pt. III: MSS Duke of Roxburghe* (1894) 12 in *Parl. Papers* (C. 7570) XLVI. 471 Twenty schillingis..to be pait to me be the saide Androu Kere or his facturis or subtenandis.
- 1477 in C. Innes *Registrum Episcopatus Brechinensis* (1856) I. 201 The saide reuerende fathir, his factouris and ministeris.
- 1485 CAXTON tr. *Thystorye & Lyf Charles the Grete* sig. avij/2 The kyng..sente anone Aurelyen his factour.
- 1526 in *Coll. Ordinances Royal Househ.* (1790) 224 Their servants, factors, or assignes.
- 1551 KING EDWARD VI *Let.* in N. Udall *Ralph Roister Doister* (1847) p. xxx (*note*) Lycense to..Nicholas Udall and to his factors and assignes to prynt..the worke of Peter Marter.
- 1570 J. FOXE *Actes & Monumentes* (rev. ed.) II. 2146/1 They..authorised..the Vicechauncelor, to be the common factor for the vniuersity.
- 1631 W. GOUGE *Gods Three Arrowes* IV. xv. 397 Parker was a kind of factor for English Seminaries and Nunnes beyond sea.
- 1776 A. SMITH *Inq. Wealth of Nations* II. v. i. 321 Those judges were a sort of itinerant factors, sent round the country for the purpose of levying certain branches of the king's revenue.
- 1856 C. MERIVALE *Hist. Romans under Empire* IV. xxxiii. 61 The jealousy of the emperor was peculiarly sensitive in regard to every act and word of his factor at Alexandria.
- 1907 F. A. OBER *Ferdinand Magellan* viii. 108 Dom Manoel had not played his last card, even when his ambassador, his factor, and their despicable tools, the hired assassins, gave up the game in despair.

- 1983 J. A. MICHENER *Poland* vi. 227 Why not let me be your factor for the Ukraine?
 2011 N. CLIFF *Holy War* III. xix. 396 One captain of Sofala murdered one Muslim merchant to whom he was deeply in debt,..and tried to stab to death the king's factor when he complained.

†**b.** A partisan, an adherent, a supporter. *Obsolete.*

In later quots. with admixture of sense 5 or sense 2a (cf. sense 4).

- c1503 R. ARNOLD *Chron.* f. lxvij² Alle the whiche done..byleuen in whichcrafte and sorsery..and their facturs.
 a1549 A. BORDE *Fyrst Bk. Introd. Knowl.* (1870) 165 Martyn Leuter & other of hys factours, in certayne thynges dyd take synistrall opinions.
 1642 T. FULLER *Holy State* v. xi. 400 Modern Factours for the Independent congregations.
 1685 E. STILLINGFLEET *Origines Britannicæ* iv. 168 Valens and Ursacius, two very busie Factours in the Arian Cause.
 1715 R. BENTLEY *Serm. Popery* 26 What is He but a vile Factour to Libertinism and Sacrilege?

3.

a. Chiefly *Sc.* A manager of a landed estate for the owner; a land steward; an agent for a landlord.

Especially in Glasgow, a 'factor' may act for a tenants' association.

- 1520 in R. Renwick *Extracts Rec. Stirling* (1887) I. 6 Sir Johen Patonsoun..hais maid Johen Make factour and inbringar of all anuales pertenyng to him.
 1561 T. NORTON tr. J. Calvin *Inst. Christian Relig.* II. viii. f. 60^v If any idle factore or baylye do deuoure his masters substance.
 1575 in T. M'Crie *Life A. Melville* (1819) I. 150 (*note*) His hienes chalmerlan and factor to the said priorissie of the Senis.
 1640 in J. Nicholson *Minute Bk. War Comm. Covenanters Kirkcudbright* 24 July (1855) 17 That he retein in his own hand his factor's fie.
 1683 in *Pennsylvania Arch.* (1852) I. 54 W^m Pickering of y^r Province factor..to one Growden.
 1722 R. WODROW *Corr.* (1843) II. 672 Call for as many copies as you want..from Mr. M^cEwen's factor.
 1789 J. MOORE *Zeluco* II. lxxx. 183 In a short time he would be little more than a factor on his own estate.
 1804 J. BRISTED *Anthroplanomenus* I. 230 Lord Kinnaird's factor, or bailiff-steward.
 1841 T. CARLYLE *On Heroes* v. 305 The Steward, Factor as the Scotch call him, used to send letters and threatenings.
 1885 *Act 48 Vict.* c. 16 §11 It shall not be lawful for any assessor..to be employed as a factor for heritable property or land agent.
 1914 F. NIVEN *Justice of Peace* III. iv The landlord's agent (or factor, as he is usually called in Glasgow).

1938 L. MACNEICE *I crossed Minch* II. viii. 111 A large lady with grey hair whose father was a factor on a large Highland estate.

2000 *Herald (Glasgow)* 13 Mar. 15 First viewer buzzes. Then second, third, fourth, fifth..and sixth. Go through prepared speech several times..then forget the answer to the very first question posed: how much are your factor's bills?

b. Sc. Law. An agent or trustee appointed to administer the estate of another; = *judicial factor n.* at JUDICIAL *adj.* and *n.* Special uses. Now *hist.*

1690 *Acts Sederunt Scotl.* (1740) I. 166 The Factor shall be lyable for Annualrent of what Rents he shall recover.

1726 *Acts Sederunt Scotl.* (1790) at *Factors* That Factors upon sequestrated estates shall..make up a rental of the estate.

1753 *Trial J. Stewart* 153 The sole offence taken at Glenure, was his acting in the quality of factor on the forfeited estate of Ardshiel.

1807 W. M. MORISON *Decisions Court of Session* XXXIII. App. at *Sequestration* The Lord Ordinary sequestrated the subjects in question, and appointed a factor to uplift the rents.

2011 S. STROH *Uneasy Subj.* iv. 127 Mungo Campbell being the factor for the forfeited estates of the area.

c. U.S. Law. In Vermont and Connecticut: a third party who is served notice by a court to surrender money in settlement of a debt or claim; = GARNISHEE *n.*

1858 C. D. DRAKE *Treat. Law of Suits by Attachm.* (ed. 2) xviii. 350 §451 In Vermont and Connecticut, he [*sc.* the garnishee] is sometimes called a factor.

1922 H. B. HAWES et al. *Corpus Juris* XXVIII. 16/1 In those jurisdictions where garnishment is called 'trustee process' or 'factorizing process', the garnishee is called 'trustee' or 'factor' respectively.

1995 B. A. GARNER *Dict. Mod. Legal Usage* (ed. 2) 347/1 In some American states, meanwhile, factor may refer to a garnishee.

4. *fig.* and in figurative contexts of preceding senses.

1593 R. HOOKER *Of Lawes Eccl. Politie* Pref. 32 All such partes of the worde of God..no lesse vnsoundly taught and interpreted by all authorized English Pastors, then by Antichristes factors themselues.

1601 A. DENT *Plaine Mans Path-way to Heauen* 81 All other vices are but Factors to Couetousnesse.

1673 tr. E. de Refuge *Art of Complaisance* 70 Reason and honesty are too oft made factours to their avarice.

- a1704 T. BROWN *Satire upon Quack* in *Wks.* (1720) I. 70 Death's busy Factor, Son of Desolation.
 ?1750 in A. Pennecuik *Compl. Coll. Poems* I. 8 This Ignorance, the Source of all our Evil, Sae her a faithful Factor to the Devil.
- 1765 W. STEVENSON *Orig. Poems* II. 90 The rich man..Is but a factor for the skies; Accountable, when fates unfold, Even for his smallest mite of gold.
- 1897 F. B. COFFIN *Poems* 61 All of life's temptations Surround my head, and I must be A factor to the nation.
- 1933 'H. MACDIARMID' in *Free Man* 7 Oct. 6/2 Brooding again on Edinburgh..Mere factor to London now.
- 1990 S. RAVEN *'Is there anybody there?' said Traveller* 144 The vile Teuton that was banker turned up a nine to my nought, and the devil's factor lifted my pretty counters.

** A person who does, makes, or creates something (without implication of agency for another).

5. A person or (less commonly) thing that makes or does something; a doer, maker, creator, performer, perpetrator; an author. Now *rare*.

ode-factor: see ODE *n.* Compounds 1.

- 1461–2 *Rolls of Parl.: Edward IV* (Electronic ed.) Parl. Nov. 1461 §18. m. 11 The same Henry, actour, factour and provoker of the seid commocion.
- 1563 W. BALDWIN et al. *Myrrour for Magistrates* (new ed.) II. f. Ciiii Disguysed devyls, Sworne foes of vertue, factours of all evylls.
- 1598 J. DICKENSON *Greene in Conceipt* 16 Where vertue hath one affecter, vice hath many factors.
- a1632 T. MIDDLETON & J. WEBSTER *Any Thing for Quiet Life* (1662) I I have got a Dutch Painter to draw Patterns, which Ile have sent to your Factors..to have pieces made for mine own wearing of a new invention.
- a1635 R. CORBET *Poems* (1647) 61 Their Playes had sundry grave wise factors, A perfect Diocess of Actors.
- 1664 A. BROME *Songs & Other Poems* (ed. 2) II. 180 The proemium is so small, To be called Poet, and wear bayes, And Factor turn of Songs and Playes, This it no wit at all.
- 1702 *Clarendon's Hist. Rebellion* I. III. 141 An avow'd Factor and Procurer of that odious Judgement.
- 1863 C. C. CLARKE *Shakespeare-characters* xiii. 321 To fasten upon the factor of his monster-crime its responsibility.
- 1906 G. PYBURN *Makers of Wealth* 12 Land, Capital and Labor, according to John Stuart Mills [*sic*], are the three factors of wealth... Labor is in fact the sole factor or maker of wealth.

II. An element or constituent, *esp.* one which contributes to or influences a process or result.

6.

a. *Mathematics.* Each of two or more whole numbers or quantities which, when multiplied together, produce a given number or expression. Also in extended use.

common, highest common, primary, prime factor: see the first element.

- 1658 G. ATWELL *Faithfull Surveyour* xxxviii. 112 Because there are four figures in the Fractions of the two Factours; therefore there are also four in the product.
- 1673 J. KERSEY *Elem. Algebra* I. I. iv. 15 The Quantities given to be multiplied one by the other are called Factors.
- 1730 *Philos. Trans. 1729–30* (Royal Soc.) 36 85 The Product of the Factors that involve impossible Roots in an Equation can never have its Signs changed by substituting any real Quantity whatsoever in place of x .
- 1780 *Philos. Trans.* (Royal Soc.) 70 408 For that zy may be positive, the signs of the two factors z and y must be alike.
- 1825 *Trans. Royal Irish Acad.* 14 Science 80 This might be integrated by resolving it into its factors, but more elegantly by ascending to a differential equation of an higher order.
- 1872 H. SPENCER *Princ. Psychol.* (ed. 2) II. VII. i. 307 Error in either factor must involve error in the product.
- 1906 W. H. YOUNG & G. C. YOUNG *Theory of Sets of Points* iv. 37 If the sets G_1, G_2, \dots are all equivalent, and γ be their number, the equation $g = \gamma g_1$ is substituted for the preceding equation; g is then called the product of the factors γ and g_1 .
- 1965 E. M. PATTERSON & D. E. RUTHERFORD *Elem. Abstr. Algebra* ii. 44 Every element x of a finite group G generates a cyclic subgroup whose order is a factor of the order of G .
- 2011 P. M. HIGGINS *Numbers: Very Short Introd.* i. 9 11 and 13 are two consecutive odd numbers that are both prime, separated by the number 12, which in contrast has many factors for its size.

b. A number by which a quantity is or should be multiplied; a multiplier; a ratio.

by a factor of: by an amount that is numerically larger or smaller by the specified multiple.

conversion, discount, integrating, proportionality, scale factor, etc.: see the first element.

- 1779 B. TALBOT *New Art of Land Measuring* VI. 127 Multiply the sides A B and B C together, and that product by the factor, for the included angle at B, gives the area of the triangle.
- 1837 J. CHALLIS *Astron. Observ. Observatory of Cambr.* XI. p. xxxvi The value employed is $16^s, 6$, multiplied by a factor taken from Caturegli's Ephemeris.
- 1911 *Proc. 31st Ann. Meeting Soc. Promotion Agric. Sci.* 108 To get the factor for carbohydrate valuation multiply the per cent. of fat by 2.25, add this product to the amount of crude fibre.
- 1916 B. LASKER *Brit. Syst. Labor Exchanges* 253 Reduced by a factor of four-sevenths when applied to schedule-rated plants.
- 1938 *Rev. Sci. Instruments* 9 221/1 No variations in the scaling factor were found for pulses varying in amplitude by a factor of six.
- 1950 *Materials Surv.: Lumber, Railroad Ties* (U.S. Dept. Agric., Forest Service) 153 The average factor for converting cross ties to board foot measure is about 35 board feet per tie.

- 1990 *Proc. Royal Microsc. Soc.* **25** 304/1 An image-splitting eyepiece for measuring particle diameters, which had a setting capability that exceeded the Airy resolution limit by a factor of ten.
- 2002 *Which? Tax Saving Guide* 51/2 He multiplies the purchase price by the indexation factor for May 1983 (1.921) to get an indexed cost of £57,630.

c. factor of merit *n.* (originally) a measure of the sensitivity of a reflecting galvanometer (now *rare*); (in later use) a numerical expression taken as representing the performance or efficiency of a given device, material, or procedure; = *figure of merit* at FIGURE *n.*
20c.

- 1888 *Proc. Physical Soc.* **10** 434 Mr. Swinburne thought that the factor of merit of a galvanometer should be determined differently, according as it was to be used for the measurement of current, or quantity, or for null methods merely.
- 1890 *London, Edinb. & Dublin Philos. Mag.* 5th Ser. **30** 84 An important question to decide is whether the factor of merit of a galvanometer should be stated for a constant periodic time of oscillation, or for a constant controlling-field.
- 1922 R. GLAZEBROOK *Dict. Appl. Physics* II. 375/1 The accepted period being 10 seconds, it follows that for any galvanometer the Factor of Merit is $100 D/T^2 (R_G)^{1/2}$ or $100 D/T^2 (R_G)^{2/5}$, T being the period in seconds, R_G the resistance of the galvanometer, and D the deflection in millimetres at 1 metre.
- 1980 A. HADNI in K. J. Button *Infrared & Millimeter Waves V3* iii. 157 Different factors of merit have been proposed for the pyroelectrics used in pyroelectric vidicons.
- 2002 M. A. T. SANDULEANU & E. A. J. M. VAN TUIJL *Power Trade-offs & Low Power in Analog CMOS ICs* iv. 76 For comparison with other low-voltage transconductors we need a factor of merit in which dynamic range, THD power and tuning are taken into account.

d. Photography. In full **filter factor**. A numerical measure of the darkness or density of an optical filter, equal to the ratio of the exposure required with it in place to that required when it is not in place.

- 1900 *Photo-miniature* Mar. 494 After the negatives are dry make a set of proofs. The one which shows a properly exposed foreground indicates the proper factor for the screen, that is, the number by which the normal exposure is to be multiplied in order to get its equivalent exposure with the screen in place.
- 1931 *Movie Makers* Feb. 67/2 (*adv.*) If you are using a filter, move the filter factor ring and the new lens stop is read instantly.
- 1991 *Photo Answers* July 66/1 A filter that has a x2 filter factor needs twice as much exposure—one stop.

2002 G. RAND & D. LITSCHER *Black & White Photogr.* ix. 184/2 If the photographer is using a TTL meter system, the filter factor is taken care of because the light reading is made through the filter.

7.

a. An element which enters into the composition of something; a circumstance, fact, or influence which contributes to a result.

- 1816 S. T. COLERIDGE *Statesman's Man*. App. p. vi The reason,..is the science of the universal, having the ideas of oneness and allness as its two elements or primary factors.
- 1845 R. C. TRENCH *Fitness Holy Script*. i. 17 This Book..is so essential a factor in the spiritual life of men.
- 1878 W. E. GLADSTONE *Homer* 77 The first factor in the making of a nation is its religion.
- 1901 *Contemp. Rev.* Mar. 361 For years the supply of teachers exceeded the demand; now it is the other way.., and that is one of the factors in the training college problem.
- 1940 *Bot. Gaz.* **101** 684 The rate of development of flowers, fruits, and the like is influenced by environmental factors.
- 1979 W. F. MURPHY *Vicar of Christ* 204 Being an athlete or the child of an alumnus can be a critical factor for admission.
- 2002 P. AUGAR & J. PALMER *Rise Player Manager* xiii. 291 A committed and motivated workforce is a key factor in providing the competitive edge.

b. With modifying word: the influence or significance of something specified, in the context of a larger situation; the specified element as a (usually important) component affecting the outcome, nature, or perception of something. Chiefly with *the*.

buggeration, fear, feel-good, nuisance, risk, sleaze, X, yuck factor, etc.: see the first element.
See also *chill factor* *n.* at CHILL- *comb. form* Additions, *wind-chill factor* *n.* at WIND *n.*
Compounds 2.

- 1851 D. H. RIDDLE *Ground of Confidence in Foreign Missions* 15 The excesses which seem almost necessarily incident to the human factor in the elements of progress.
- 1892 *Alienist & Neurologist* **13** 142 In citation of cases to illustrate the unlikeness of children to parents as degeneration stigmata, Lombroso completely ignores this race factor.
- 1920 *E. India Comm. Indian Exchange & Currency* II. 204/2 in *Parl. Papers* (Cmd. 528) XIV. 183 Assume that the Government of India were to say that they would not pay more than a dollar an ounce?—I think, eliminating this uncertain China factor, the price would probably come back to your level.
- 1956 *Caribbean Q.* **4** 226 Closely related to the excitement factor..is the bearing which Carnival has on religious behaviour.
- 1982 *Washington Post* 7 May A26/4 One of the Social Democrats' four co-leaders, William Rodgers, said, 'The Falklands factor is a major one' in the disappointing showing of his party.

2009 *Sunday Herald (Glasgow)* 22 Mar. (Opinion section) 6/1 The first task is for us Scots to overcome the cringe factor about speaking in our own accent and with our own vocabulary.

8.

a. Medicine. Any of various protease enzymes and other substances present in blood which are involved in the process of coagulation, many of which have been assigned identifying (usually Roman) numbers.

See also *factor VIII n.* at *Compounds 2*.

Some of the numbered factors are better known by other names (e.g. factor I, fibrinogen; factor II, prothrombin), and some numbers are not assigned.

- 1864 *Nat. Hist. Rev.* Apr. 162 In striving to determine and isolate the blood-factor, Schmidt found that while serum apparently perfectly free from corpuscles had still the coagulating power, yet the presence of red corpuscles vastly increased its energy.
- 1911 *Amer. Jrnl. Physiol.* **29** 209 Circulating blood contains normally all the necessary fibrin factors, namely, fibrinogen, prothrombin, and calcium.
- 1947 P. A. OWREN in *Acta Med. Scand.* Suppl. CXCIV. 76 Besides prothrombin, thrombokinase, calcium and fibrinogen a fifth factor is needed in order to ensure a normal course of the coagulation process. The factor which is included in the first stage of the coagulation process will be termed *Factor V*.
- 1974 R. PASSMORE & J. S. ROBSON *Compan. Med. Stud.* III. xxi. 56/1 Factors II (prothrombin), VII, IX and X are all manufactured by the liver in the presence of adequate vitamin K₁.
- 1997 K. J. CLEMETSON in J. Montreuil et al. *Glycoproteins II* ix. 191 Von Willebrand factor (vWf) plays an essential role in haemostasis by acting as the carrier molecule for factor VIII.
- 2008 *Independent* 29 Jan. (Extra section) 10/3 The bewildered doctors in intensive care struggled for days to staunch the bleeding... Finally, they decided to try an expensive clotting agent called Factor VII.

b. Genetics. Originally: an agent that is transmitted from parent to offspring and influences or determines a hereditary character; a gene. Now: *esp.* an agent of transmission of inherited characters that does not have the precise attributes usually implied by the word 'gene' (e.g. that is found outside the nuclear chromosomes).

The broad sense 'gene' persists *esp.* in discussions of the history of genetics and in elementary explanations of its principles.

- 1901 K. PEARSON in *Philos. Trans.* (Royal Soc.) A. **197** 287 Differentiation, whether due to function, position on the individual, season of production, &c., is usually connected with one or two well-marked dominating factors.
- 1907 R. C. PUNNETT *Mendelism* (ed. 2) 23 Every zygotic cell, being formed by the fusion of two gametes, is a double structure, and contains two factors belonging to any given pair of characters.

- 1927 J. B. S. HALDANE & J. S. HUXLEY *Animal Biol.* ii. 62 These units are called factors of heredity, or sometimes still more shortly the *genes*.
- 1949 C. D. DARLINGTON & K. MATHER *Elements of Genetics* ii. 40 We must then say that the two alternative determinants or factors of each kind in a zygote may be alike or different.
- 1961 U. MITTWOCH tr. E. Hadorn *Developmental Genetics* i. 1 Not all hereditary factors which obey Mendelian laws should be described as genes, and this applies particularly to lethal factors. A large number of these are due to a loss of more or less extensive pieces of chromosome.
- 1964 D. WILKIE *Cytoplasm in Heredity* i. 1 Non-mendelian patterns of inheritance are often interpreted as demonstrating genetic control by cytoplasmic factors.
- 2002 H. BERTRAND & D. BAIDYARROY in H. D. Osiewacz *Molecular Biol. Fungal Devel.* xvii. 424 Other cytoplasmically transmitted factors, namely mutant forms of mitochondrial DNA..and certain mitochondrial plasmids, also can dramatically reduce the pathological aggressiveness of the chestnut blight fungus.

c. Biology. Any of various vitamins, hormones, or other substances which promote or stimulate cell growth, differentiation, or some other cellular or physiological process.

accessory, extrinsic, growth, releasing, rhesus, sex, transfer factor: see the first element.

- 1912 F. G. HOPKINS in *Jrnl. Physiol.* **44** 425 (*title*) Feeding Experiments Illustrating the Importance of Accessory Factors in Normal Dietaries.
- 1922 *Times Lit. Suppl.* 27 Apr. 279/1 Chickens prove particularly susceptible to an insufficiency of the water-soluble or B factor.
- 1946 *Vitamins & Hormones* **4** 2 Certain of these factors have been isolated as crystalline compounds, some have been obtained as concentrates, while still others are known only in crude natural vitamin carriers.
- 1967 *Canad. Med. Assoc. Jrnl.* 7 Oct. 940/2 The isolation and partial characterization of an 'aggregation factor' which causes the clumping of separated sponge cells is also described.
- 1986 R. F. LEVINE in D. Phillips & M. A. Shuman *Biochem. Platelets* xi. 418 Clonal proliferation of megakaryocytes *in vitro* requires the presence of a growth-stimulating factor.
- 2010 T. W. SADLER *Langman's Med. Embryol.* (ed. 11) x. 151/2 Serum response factor (SRF) is a transcription factor responsible for smooth muscle cell differentiation.

9. With following numeral: a sunscreen product of the sun protection factor specified.

- 1982 *Jrnl. Amer. Acad. Dermatol.* 7 690/1 The application of a factor 15 sunscreen prior to high-dose UVA exposure.
- 1993 A. MCNAB *Bravo Two Zero* i. 9 We ran around organizing kit..and screaming into town to buy ourselves new pairs of desert wellies and plenty of Factor 20 for the nose.
- 2005 *Time Out* 7 Dec. 172/1 There are some amusing moments, not least a pig being smeared in Factor 30 on Delvoye's sunny art farm in China.

COMPOUNDS

C1. General *attrib.* and appositive (in sense 1), as ***factor merchant***, etc.

- 1710 LD. SHAFTESBURY *Soliloquy* 145 Certain Merchant-Adventurers in the Letter-Trade, who in Correspondence with their Factor-Bookseller, are enter'd into a notable Commerce with the World.
- 1778 *West India Merchant* xx. 155 The profits we received by so many of the rich planters and their factor merchants.
- 1858 H. VAUGHAN *Addr. River Usk* Pref. 18 The factour~wind from far shall bring The odours of the scattered spring.
- 1880 R. BROWNING *Clive in Dramatic Idyls* 91 This fell in my factor-days.
- 1907 *Hearings before Comm. on Interoceanic Canals* (U.S. Senate, 59th Congr., 2nd Sess. I. 535 When Secretary Taft's statement was made about our being in the factor business.
- 1997 D. H. WHITTAKER *Small Firms in Japanese Econ.* ii. 25 Small-scale production in the Meiji period was frequently organised by *tonya* factor-merchants.
- 2001 N. BUDGELL *Newfoundland Son* viii. 72 My objective was to walk to Rigolet, a Hudson Bay Post at the mouth of the Hamilton inlet,..where my uncle George Budgell was Factor Manager.

C2.

factor analysis *n.* an analysis of contributory factors; (*Statistics*) a mathematical technique for calculating the relative importance of each of a set of factors that together are assumed to influence some observed values or properties; a mathematical procedure for accounting for relationships between a number of variates in terms of a smaller number of factors.

- 1928 *Standards Yearbk.* (National Bureau Statistics) 4 The factor analysis essential to standardization of process stimulates the development of measured controls.
- 1931 L. L. THURSTONE in *Psychol. Rev.* **38** 406 It is the purpose of this paper to describe a more generally applicable method of factor analysis which has no restrictions as regards group factors and which does not restrict the number of general factors that are operative in producing the correlations.
- 1969 *Computers & Humanities* **3** 145 While there are several varieties of factor analysis, each of which is designed to handle a special type of problem, they all involve rather elaborate mathematical operations.
- 2007 *Guardian* 2 Jan. (Education section) 9/1 The second paradox is that intelligence has been measured on the factor analysis of 10 IQ sub-tests, producing a general measure of intelligence known as g.

factor-analyse *v. trans.* to analyse (contributory factors); to perform a factor analysis on.

- 1939 L. W. FERGUSON in *Jrnl. Psychol.* **8** 219 The matrix secured..when factor analyzed by the centroid method yields three psychologically meaningful, but only two statistically significant factors.
- 1955 *Abstr. Diss. for Degrees* (Univ. Maryland) 15 May 87 A recent proposal has been made to convert psychophysical data..to estimates of correlation and to factor analyze the matrix of estimates of correlation.
- 1992 *Behavioural Pharmacol.* **3** 21/2 The adjectives are factor analyzed into eight subscales labeled Anxiety, Depression, Anger, Vigor, Fatigue, Confusion, Friendliness, and Elation.
- 2006 R. SHEPHERD & M. RAATS *Psychol. Food Choice* v. 81 Although pickiness and neophobia items loaded on the same factor, when this factor was itself factor-analysed, the finickiness and neophobia items separated.

factor cost *n. Economics* the aggregate cost of production.

- 1936 J. M. KEYNES *Gen. Theory Employment* iii. 24 The aggregate income (*i.e.* factor cost plus profit) resulting from a given amount of employment.
- 1941 *Economist* 12 Apr. 489/2 There are two methods of valuation: the first at factor cost (that is, at what it costs to produce this output), the second at *market prices*.
- 1956 F. LAFITTE in A. Pryce-Jones *New Outl. Mod. Knowl.* 579 Factor-cost measurement gives a true indication of the amount of real economic resources appropriated by State 'consumption' services.
- 1971 *E. Afr. Jrnl.* Mar. 17/1 In 1963, agriculture, forestry and fishing contributed 8.2% of gross domestic product at factor cost.
- 2012 B. SCHMITT in C. Gnos & S. Rossi *Mod. Monetary Macroeconomics* II. iii. 89 Apart from profits, national income is equal to factor cost. When profits are added on, it means that the value of national output exceeds its factor cost.

factor VIII *n. Medicine* (also **factor eight**) a glycoprotein involved in blood clotting whose congenital deficiency causes haemophilia A (the most common form of haemophilia).

- 1954 F. KOLLER in *Blood* **9** 286 The following designations have been proposed: Factor disappearing during coagulation: Antihemophilic globulin of Cohn et al. Factor VIII. *Deficiency*: hemophilia A.
- 1981 *Economist* 13 June 85/2 Several products..are likely to be made by genetic engineering including human albumin, factor eight, [etc.].
- 1985 *New Statesman* 27 Sept. 14/3 By the middle of 1982..AIDS had appeared among haemophiliacs using the blood-derived clotting agent, Factor VIII.

2007 J. H. HULSE *Sustainable Devel. at Risk* xiii. 302 Factor VIII to control blood clotting can be synthesised in the milk of GM cattle.

factor group *n.* [after German †*Factorgruppe* (O. Hölder 1889, in *Mathematische Annalen* **34** 28; now *Faktorgruppe*)] *Mathematics* a group G/N , the elements of which are the cosets in a given group G of a normal subgroup N of G ; also called *quotient group*.

1895 *Bull. Amer. Math. Soc.* **1** 234 The proof, as given by Hölder, that the factor-groups are constant for all the series of composition of a group, easily follows by induction.

1965 E. M. PATTERSON & D. E. RUTHERFORD *Elem. Abstr. Algebra* ii. 49 If G is a finite group of order m and H is a normal subgroup of order n , then..the factor group G/H is a finite group of order m/n .

2008 M. S. DRESSELHAUS et al. *Group Theory* i. 11 The order of the factor group is the index of the self-conjugate subgroup.

factor law *n.* *Mathematics* = *factor theorem* *n.*

1901 W. J. MILNE *Acad. Algebra* 104 Factor Law.—If a rational integral expression containing x reduces to zero when a is substituted for x , it is exactly divisible by $x - a$.

2006 M. CODY *Math. Methods* 15 The null factor law is ‘if $a \times b = 0$ then $a = 0$ and/or $b = 0$ ’.

factor theorem *n.* *Mathematics* the theorem stating that $(x - a)$ is a factor of a given polynomial $f(x)$ whenever $f(a) = 0$, and vice versa.

1894 C. SMITH & I. STRINGHAM *Elem. Algebra* (rev. ed.) xiii. 182 The proposition is an immediate consequence of the factor theorem, which is itself a corollary of the remainder theorem.

1928 C. I. PALMER & W. L. MISER *Coll. Algebra* ii. 31 The factor theorem assists in factoring by giving a quick way for testing a possible factor.

1971 M. F. WILLERDING & S. P. HOFFMAN *College Algebra* ix. 267 By the Remainder Theorem, the remainder when $x^3 + 7x^2 + 3x + 3$ is divided by $x + 1$ is 6. As a corollary of the remainder theorem we have the Factor Theorem.

2010 R. D. GUSTAFSON et al. *College Algebra* (ed. 10) v. 460 We will use the factor theorem and write the three factors that correspond to the three zeros of 3, 3, and -5 .