

center (noun), **central** (adjective): from Greek *ken-tron* “a sharp point, a peg, a stationary point.” The Indo-European root is *kent-* “to prick, to jab,” as seen in the Greek-derived *amniocentesis*. In times ancient and modern, people have put a stake in the ground and attached an animal to the stake with a rope. The places that the animal could wander all lie within a circle having the stake as its center. The meaning of the word *center* was later abstracted away from the stake as a pointed object, and the word came to mean the position of the “stake” equidistant from all points on the circle. [91]

centroid (noun): from *center* and the Greek-derived *-oid* (*qq.v.*) “looking like.” Metaphorically speaking a centroid looks like a center. Actually, it doesn’t so much look like a center as behave like one. An irregular shape doesn’t really have a center in the same sense that a symmetric shape does; nor do real-world physical objects. Nevertheless, a physical object has a point at which all the mass of the object seems to be concentrated. Since that point acts like a center, it is called a centroid. [91, 244]

lamina (noun): a Latin word meaning “a thin piece of metal or wood, a flat plate.” The Indo-European root may be *stelā-* “to extend.” From the Latin word, after many modifications in French, comes *omelette*, which is flat. When a document is laminated, it is encased in a thin, flat plastic covering. A common type of calculus problem involves finding the centroid of a lamina. [210]

<http://www.maa.org/publications/ebooks/words-of-mathematics>

Ayrıca:

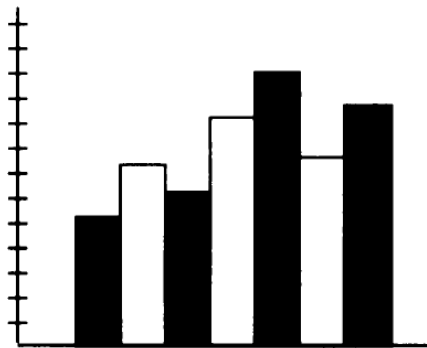
<http://mathworld.wolfram.com/Lamina.html>

exponent (noun), **exponential** (adjective), **exponentiation** (noun): from Latin *ex* “away, out,” and *ponent-*, present participial stem of *ponere* “to put.” (See more under *component*.) When you expose something, you put it out so it can be seen. Similarly, in mathematical notation the exponent is the small number or letter that is “put out” to the right and above the base when that base is being raised to a power. An exponent is therefore named after its physical appearance in writing rather than its mathematical significance. In algebra the technical name for the operation of raising a number to a power is exponentiation. An exponential function is one like 2^x in which the variable is in the exponent while the base is a constant. René Descartes’ (1596–1650) book *La Géométrie*, published in 1637, was one of the first to use our modern system of writing exponents. [49, 14, 146]

tessellate (verb), **tessellation** (noun): from Latin *tessera* “a square tablet” or “a die used for gambling.” Latin *tessera* may have been borrowed from Greek *tessares*, meaning “four,” since a square tile has four sides. The diminutive of *tessera* was *tessella*, a small, square piece of stone or a cubical tile used in mosaics. Since a mosaic extends over a given area without leaving any region uncovered, the geometric meaning of the word tessellate is “to cover the plane with a pattern in such a way as to leave no region uncovered.” By extension, space or hyperspace may also be tessellated. [108, 238]

histogram (noun): the second element, *-gram*, is indisputably from Greek *gramma* “piece of writing, picture,” from the Indo-European root *gerbh-* “to scratch,” because diagrams were originally scratched on earth, clay, etc. Reference books explain the first element, *histo-*, in two ways. (1) It may be from Greek *histos* “anything upright,” but particularly “the upright beam of a loom,” and then, by extension “anything woven, a web, a tissue.” If Greek *histos* is the source, then the Indo-European root is *sta-* “to stand,” as seen in the native English cognate *stand*. According to this explanation, the upright bars of a histogram account for its name. (2) *Histo-* may be a contraction of *history*, from Latin *historia*, in turn from Greek *istoria* “inquiry, observation.” Greek *his-*

tor “a learned man,” represents a presumed *wid-tor*, from the Indo-European root *weid-* “to see.” Compare the native English cognate *wise*. Etymologically speaking, history is “what has been seen (and presumably also understood).” According to this explanation, a histogram is a “picture history” of a statistical distribution. (3) Whoever coined the term *histogram* may have had both of the above associations in mind, since each is plausible. [208, 244, 68]



Histogram.