

The Suffix *-meter*

WORD LIST

Clayton

altimeter	barometer	diameter	geometry	kilometer
metric	metronome	micrometer	odometer	perimeter

This lesson presents the suffix *-meter*, which means “measure.” It is taken from the ancient Greek word *metron*. The common word *thermometer* is formed from the root *therm* (Greek for “heat”) and *-meter*. Many English words are formed from *-meter*, and more are being invented, especially for use in science.

- 1. altimeter** (ăl-tīm'ī-tər) *noun* from Latin *altus*, “high” + *-meter*, “measure”
An instrument that measures altitude, or height above a certain point
 - The **altimeter** showed that the plane was flying at 30,000 feet.
- 2. barometer** (bā-rōm'ī-tər) *noun* from Greek *baros*, “weight” + *-meter*, “measure”
 - An instrument, useful for predicting weather, that measures atmospheric pressure
 - If the **barometer** falls sharply, a storm is probably on the way.
 - Something that registers or shows changes; an indicator
 - The stock market is one **barometer** of economic health.

barometric *adjective* **Barometric** pressure often changes as new weather moves in.
- 3. diameter** (dī-ām'ī-tər) *noun* from Greek *dia*, “through” + *-meter*, “measure”
A line through the exact center of a figure, usually a circle or sphere
 - The **diameter** of the earth measures almost 8,000 miles.
- 4. geometry** (jē-ōm'ī-trē) *noun* from Greek *geo*, “earth” + *-meter*, “measure”
The branch of mathematics dealing with points, lines, angles, and shapes
 - Mario learned how to find the area of a circle in **geometry** class.

geometric *adjective* **Geometric** knowledge is needed both to design a spaceship and to plot a course for the moon.
- 5. kilometer** (kī-lōm'ī-tər, kīl'ā-mē'-tər) *noun* from Greek *kilo*, “thousand” + *-meter*, “measure”
A unit of length equal to 1,000 meters, or about 0.62 miles
 - In most of the world, road signs give distances in **kilometers**.
- 6. metric** (mēt'rik) *adjective* from Greek *metron*, “measure”
Referring to the international metric system of measurement
 - Grams, milliliters, and centimeters are **metric** units of measurement.

Altimeters usually measure the distance above sea level, not above the ground.

The *geo-* in *geometry* reminds us that *geometry* deals with measuring the different kinds of shapes found on Earth.

7. **metronome** (mēt' rə-nōm') *noun* from Greek *metron*, "measure" + *nomos*, "division" or "rule"

An instrument that marks time, with ticks or flashes at regular adjustable intervals

• The **metronome** helped the violin student play in rhythm.

8. **micrometer** *noun* from Greek *micro*, "small" + *-meter*, "measure"

a. (mī-krōm' ī-tār) An instrument that measures very small distances, objects, or angles

• The **micrometer** measured the thickness of the metal's plastic coating.

b. (mī'krō-mē'tār) A unit of length equal to one thousandth of a millimeter, or one millionth of a meter

• A plant's cell walls measure a few **micrometers** across.

9. **odometer** (ō-dōm' ī-tār) *noun* from Greek *hodos*, "journey" + *-meter*, "measure"

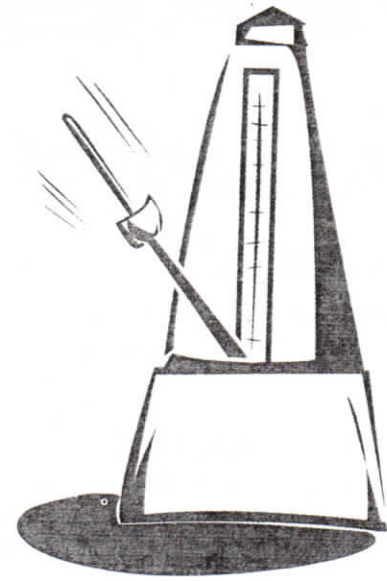
An instrument that indicates distance traveled by a vehicle

• The car's **odometer** showed that we had traveled sixty-five miles.

10. **perimeter** (pə-rīm' ī-tār) *noun* from Greek *peri*, "around" + *-meter*, "measure"

The outer boundary of a shape or an object, or the distance around that boundary

• To find the length of the **perimeter** of the tabletop, Kian measured all the sides and then added those measurements.



metronome

WORD ENRICHMENT

Big and small

Micro-, a prefix meaning "small," is found in more than one hundred English words. Examples are *micrometer* (a word in this lesson), *microorganism* (a very small living thing), *microfilament* (tiny fibers in cells), and *microsecond* (one millionth of a second), as well as more familiar words like *microwave* and *microscope*. New words using *micro-* are constantly being invented. *Microfiber*, material woven so finely that rain cannot get through it, was first used in 1966.

Macro-, a prefix meaning "big," is the opposite of *micro-*. *Macrofossils* are fossils big enough to be seen without a microscope; *microfossils* may be as small as a single cell. *Macroclimates* refer to weather conditions in a large country or land area. In contrast, a museum might need to create a *microclimate* to make sure that a single valuable object is preserved at the right temperature and humidity.

Strangely enough, *micro-* is found in a very long word that refers to a lung disease. It is *pneumonoultramicroscopicsilicovolcanokoniosis*. The word was deliberately created to be the longest one in English.