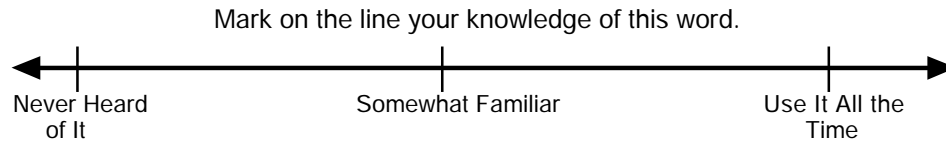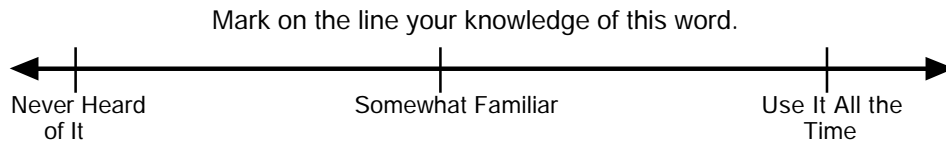**Radical**   an expression that has a root (square root, cube root, etc.)   M
(e.g., $\sqrt{25}$ is a radical). Any root can be specified by an index
number, **b**, in the form $\sqrt[b]{a}$ (e.g., $\sqrt[3]{8}$). A radical without an index
number is understood to be a square root.

Mark on the line your knowledge of this word.

$\longleftarrow$ |————————————|————————————| $\longrightarrow$

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Radical sign   the symbol ($\sqrt{}$) used before a number to show that   M
the number is a radicand.

Mark on the line your knowledge of this word.

$\longleftarrow$ |————————————|————————————| $\longrightarrow$

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Radicand   a number appears with a radical sign (e.g., in $\sqrt{25}$, 25 is the radicand).   M

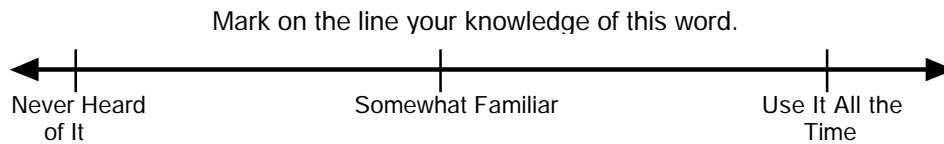Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
of It   Time
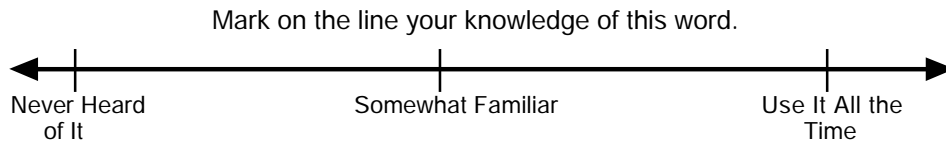
Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Radius   a line segment extending from the center of a circle or sphere to a point on the circle or sphere.   M
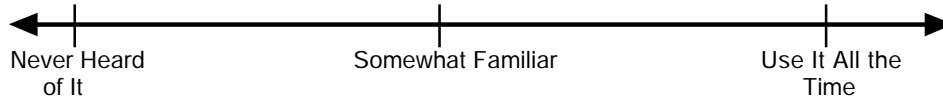
Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Range   the lowest value (L) in a set of numbers through the highest   E
value (H) in the set. When the width of the range is expressed
as a single number, the range is calculated as the difference
between the highest and lowest values. More advanced
presentations show the range calculated as (H – L + 1).
The result of either calculation would be considered correct.

Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Rate/distance   calculations involving rates, distances, and time   M
intervals, based on the distance, rate, time formula ($D = rt$).

Mark on the line your knowledge of this word.
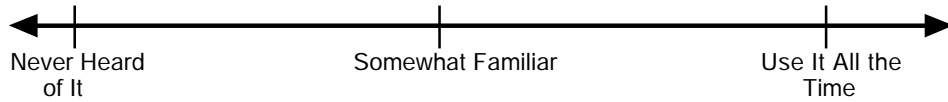
Never Heard   Somewhat Familiar   Use It All the
of It   Time
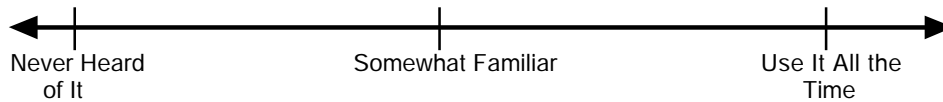
Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Ratio the comparison of two quantities (e.g., the ratio of *a* and *b* is   E

$\frac{a}{b}$, where *b* 0.

Mark on the line your knowledge of this word.

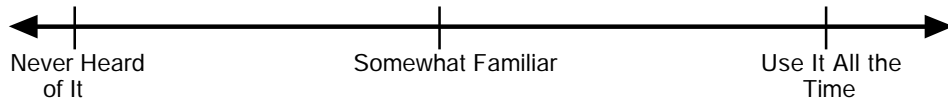Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Rational number a real number that can be expressed as a   M
ratio of two integers.

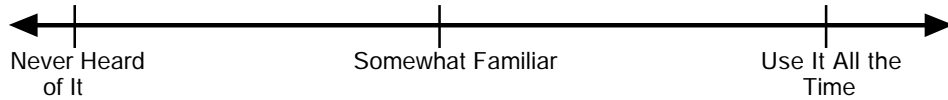Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Ray   a portion of a line that begins at a point and goes on forever in one direction.   E
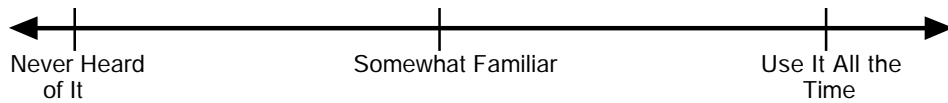
Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
   of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Real number   all rational and irrational numbers.   M
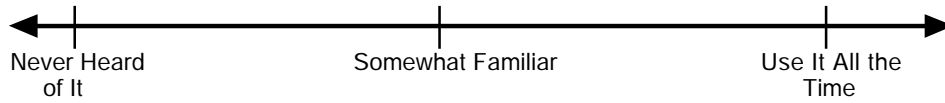
Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
   of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Reciprocal   see *Multiplicative inverse*.   H
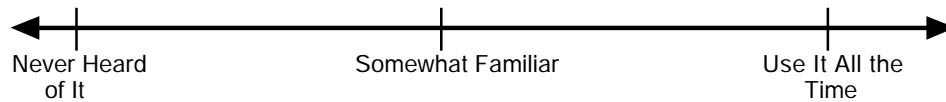
Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
   of It   Time

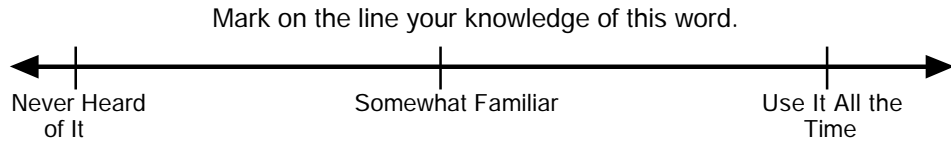| Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

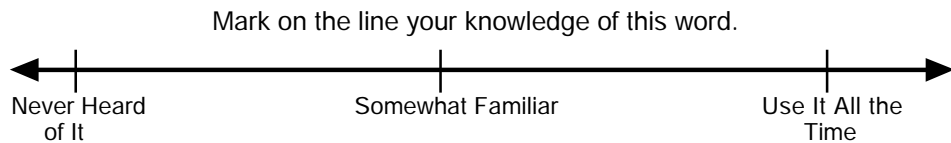**Reflection**   see *Flip*.   E

Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
   of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Reflexive axiom of equality   a number or expression is equal to itself (e.g., *ab* = *ab*).   H

Mark on the line your knowledge of this word.

Never Heard of It — Somewhat Familiar — Use It All the Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Regular polygon   a polygon that is both equilateral and equiangular.   E

Mark on the line your knowledge of this word.

Never Heard of It — Somewhat Familiar — Use It All the Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Relation   see *Pattern.*   E
(relationship)

Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
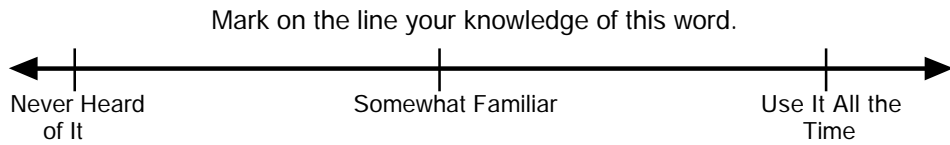   of It   Time
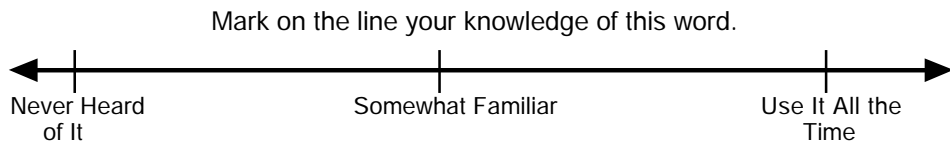
Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Relative size   the size of one number in comparison to the size of   M
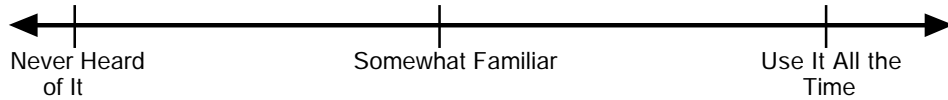another number or numbers.

Mark on the line your knowledge of this word.

←————————|———————————|———————————|————————→
Never Heard   Somewhat Familiar   Use It All the
   of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Right angle   an angle whose measure is exactly 90°.   E
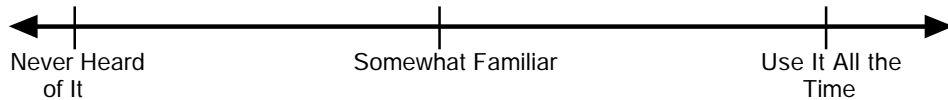
Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Right circular   a cylinder in which the bases are parallel circles   M
cylinder   perpendicular to the side of the cylinder.
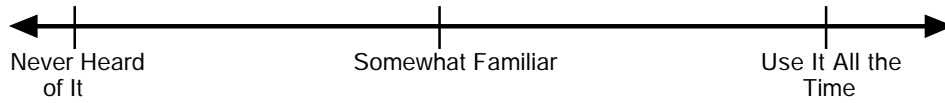
Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Right prism or rectangular solid   a three-dimensional figure (polyhedron) with congruent, polygonal bases and lateral faces that are all parallelograms.   M

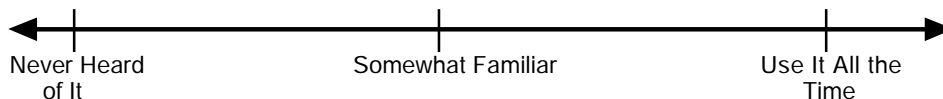Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Right triangle geometry   finding the measures of missing sides or angles of a right triangle when given the measures of other sides or angles.   H

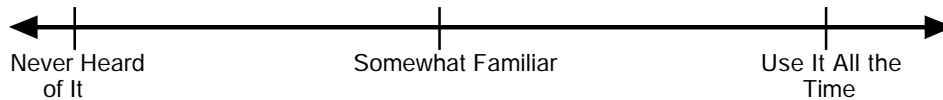Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Rise   the change in *y* going from one point of *x* to another   M
(the vertical change on the graph).

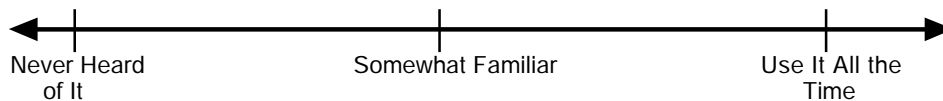Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
    of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Rotation   a transformation of a figure by turning it about a center   E
point or axis. The amount of rotation is usually expressed
in the number of degrees (e.g., a 90° rotation). Also called a *Turn*.
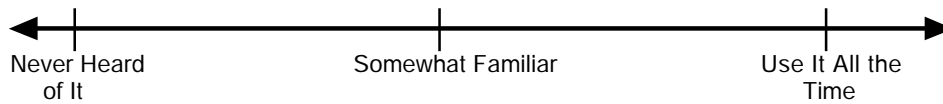
Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
    of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Rule a mathematical expression that describes a pattern or
relationship, or a written description of the pattern or
relationship.   E
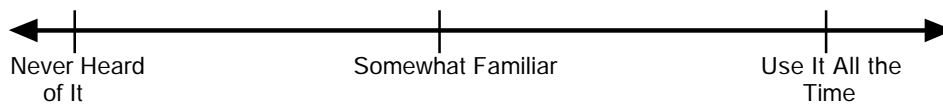
Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Run the change in *x* going from one point of *y* to another (the
horizontal change on the graph.   M
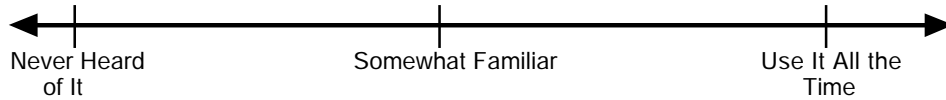
Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Scale model   a model or drawing based on a ratio of the dimensions   E
for the model and the actual object it represents (e.g., a map).

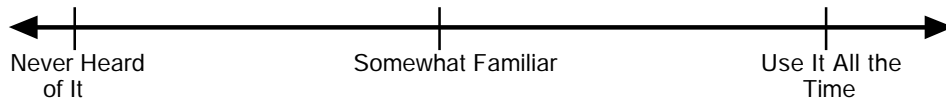Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Scales   the numeric values assigned to the axes of a graph.   E

Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Scatter Plot   a graph of data points, usually from an experiment, that is used to observe the relationship between two values.   M

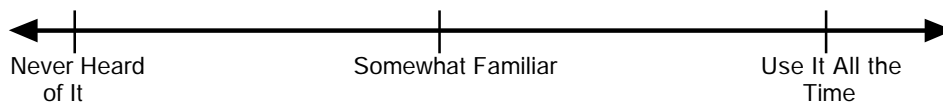Mark on the line your knowledge of this word.

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   of It   Time
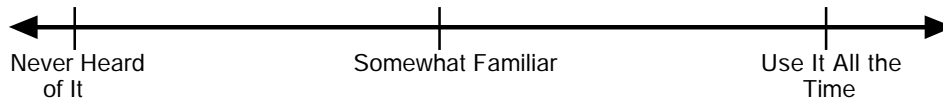
Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Scientific notation   a shorthand method of writing very large or very small numbers using exponents in which a number is expressed as the product of a power of 10 and a number that is greater than or equal to one (1) and less than 10 (e.g., $7.59 \times 10^5 = 759{,}000$). It is based on the idea that it is easier to read exponents than it is to count zeros. If a number is already a power of 10, it is simply written 10^{27} instead of 1×10^{27}.   M
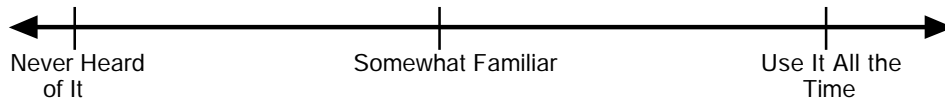
Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
   of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Sequence   an ordered list with either a constant difference   M
(arithmetic) or a constant ratio (geometric).
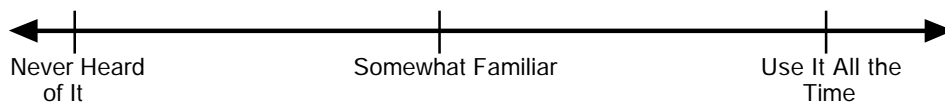
Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Side   the edge of a geometric figure (e.g., a triangle has three sides).   E

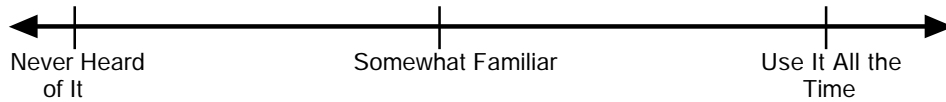Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Similar figures   figures that are the same shape, have corresponding, congruent angles, and have corresponding sides that are proportional in length.   E
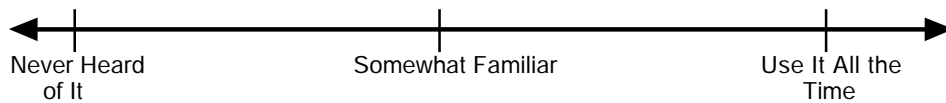
Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
  of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Similarity   a term describing figures that are the same shape but are not necessarily the same size or in the same position.   E

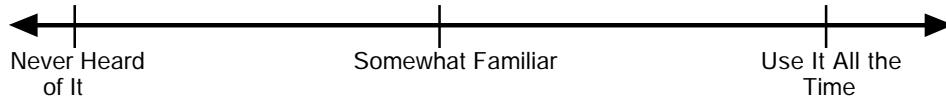Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
  of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Slide   to move along in constant contact with the surface in a vertical,   E
horizontal, or diagonal direction. Also called a *Translation*.
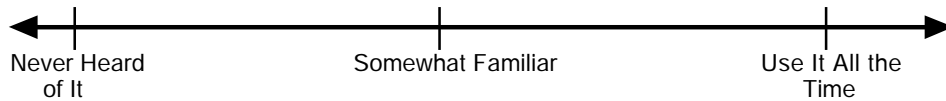
Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
   of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Slope   the constant, m, in the linear equation for the slope-intercept   M
form $y = mx + b$. The ratio of change in the vertical axis (y-axis)
to each unit change in the horizontal axis (x-axis) in the form $\dfrac{rise}{run}$ or $\dfrac{Dy}{Dx}$.
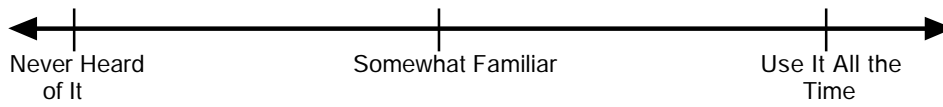
Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
   of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Solid figures   three-dimensional figures that completely enclose   M
a portion of space (e.g., a rectangular solid, cube,
sphere, right circular cylinder, right circular cone, and
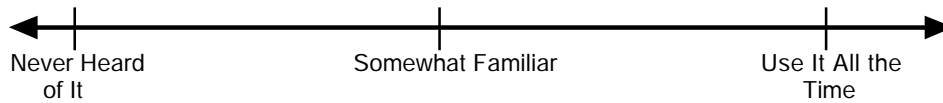square pyramid).

Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
  of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Spatial relationships   relationships of figures existing or happening   E
in space.

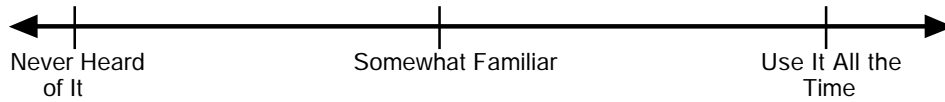Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
  of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Square root   a positive real number that can be multiplied by itself   M
                 to produce a given number (e.g., the square root of 144
                 is 12 or $\sqrt{144} = 12$).
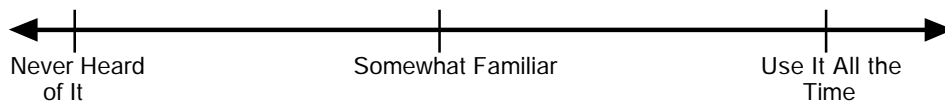
Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
   of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Squiggle   see *Break*.   M
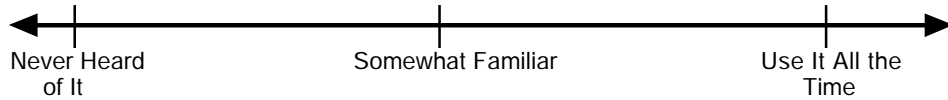
Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
   of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Standard units of measure   accepted measuring devices and units of the customary or metric system.   E

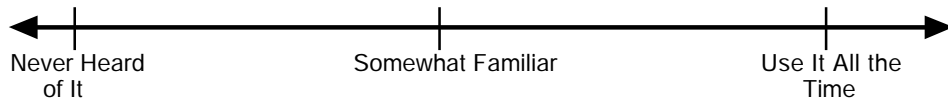Mark on the line your knowledge of this word.

Never Heard of It — Somewhat Familiar — Use It All the Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Straight angle   an angle whose measure is exactly 180°.   E
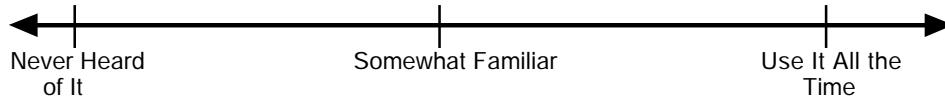
Mark on the line your knowledge of this word.

Never Heard of It — Somewhat Familiar — Use It All the Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Supplementary angles   two angles, the sum of which is exactly 180°.   M
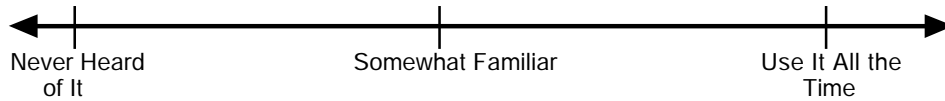
Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Surface area of a   the sum of the areas of the faces of the figure   M
geometric solid   that create the geometric solid.

Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
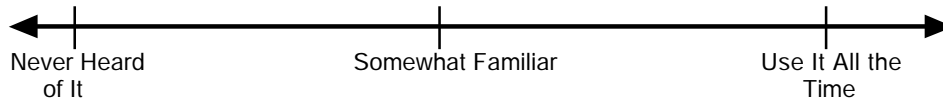of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Symbolic expression   a symbol or set of symbols expressing a   E
mathematical quantity or operation
(e.g., 2*x* is equal to two times *x*).
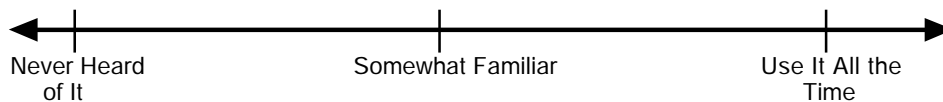
Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Symbolic   expressions represented by symbols (e.g., circles   M
representations   shaded to represent $\frac{1}{4}$ or variables used to represent
of numbers   quantities).

Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
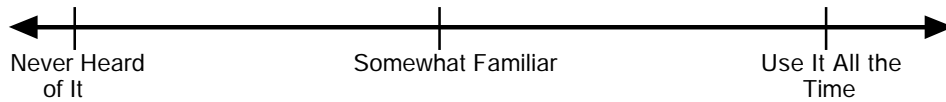of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Symmetry a term describing the result of a line drawn through
the center of a figure such that the two halves are congruent.   E
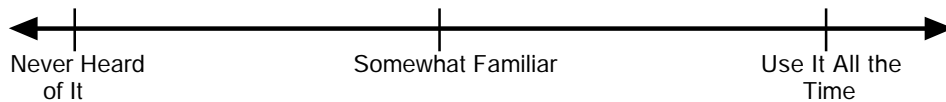
Mark on the line your knowledge of this word.

←———————|———————————————|———————————————|———————→

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

System of a group of two or more equations that share variables. The   H
equations solution to a system of equations is an ordered number set
that makes all of the equations true.
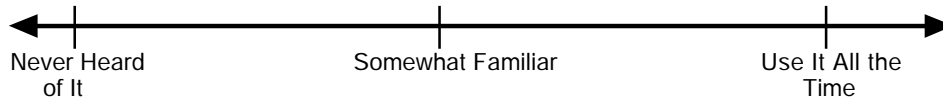
Mark on the line your knowledge of this word.

←———————|———————————————|———————————————|———————→

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Table   a data display.   M

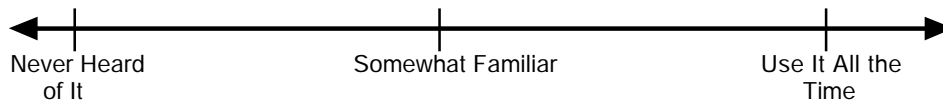Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Tessellation   a covering of a plane with congruent copies of the   M
same pattern with no holes and no overlaps, like floor tiles.

Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
of It   Time

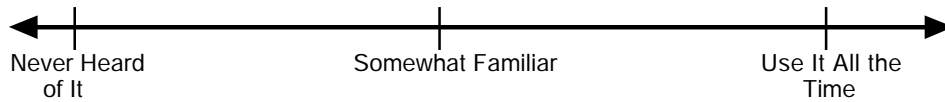| Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Theoretical/expected probability   the likelihood of an event happening based on theory rather than on experience and observation.   E

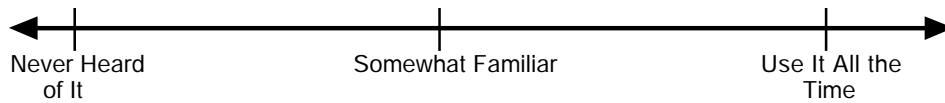Mark on the line your knowledge of this word.

←———|—————————————|—————————————|———→
Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Transformation   an operation on a geometric figure by which another image is created. Common transformations Include flips, slides, and turns.   E
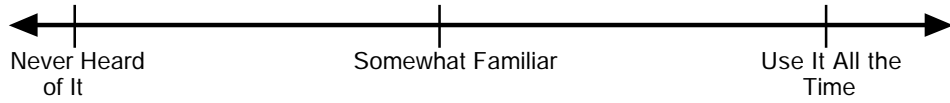
Mark on the line your knowledge of this word.

←———|—————————————|—————————————|———→
Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Transitive property   when the first element has a particular relationship to a second element that in turn has the same relationship to a third element, the first has this same relationship to the third element (e.g., if $a = b$ and $b = c$, then $a = c$). Identity and equality are transitive relationships.
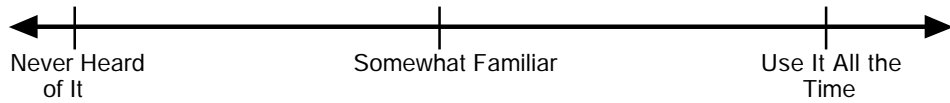
H

Mark on the line your knowledge of this word.

Never Heard
of It

Somewhat Familiar

Use It All the
Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

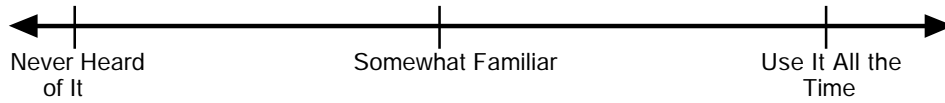**Translation**   see *Slide*.

E

Mark on the line your knowledge of this word.

Never Heard
of It

Somewhat Familiar

Use It All the
Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Transversal   a line that intersects two or more lines at different points.   M
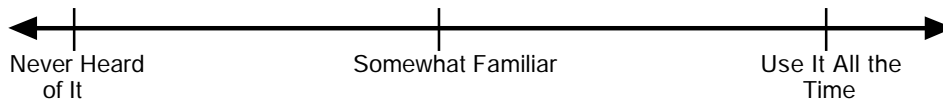
Mark on the line your knowledge of this word.

Never Heard
of It   Somewhat Familiar   Use It All the
                                                              Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Tree diagram   a diagram in which all the possible outcomes   E
of a given event are displayed.

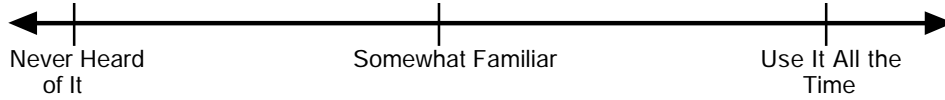Mark on the line your knowledge of this word.

Never Heard
of It   Somewhat Familiar   Use It All the
                                                              Time

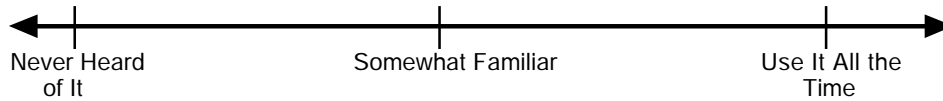| Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Turn see *Rotation*. E

Mark on the line your knowledge of this word.

←———|————————————|————————————|———→
Never Heard   Somewhat Familiar   Use It All the
   of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Unorganized data data that are presented in a random manner. E
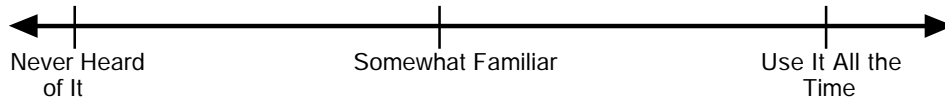
Mark on the line your knowledge of this word.

←———|————————————|————————————|———→
Never Heard   Somewhat Familiar   Use It All the
   of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Variable   any symbol that could represent a number.   E
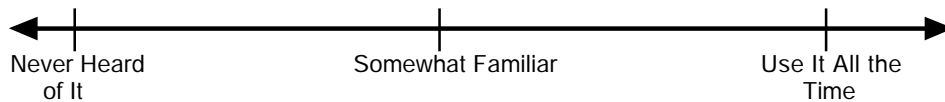
Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Vertex   the common endpoint from which two rays begin   E
(e.g., the vertex of an angle) or the point where two
lines intersect; the point on a triangle or pyramid
opposite to and farthest from the base.

Mark on the line your knowledge of this word.

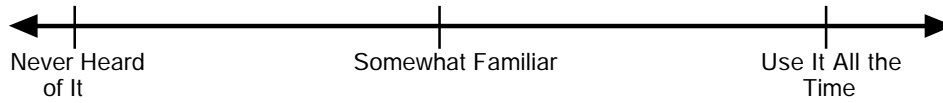Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Vertical angles   the opposite angles formed when two lines intersect.   M
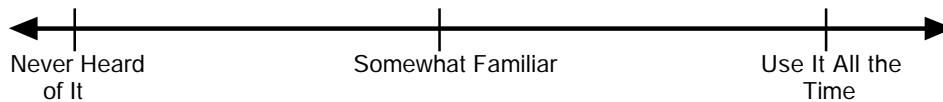
Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
   of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Volume   the amount of space occupied in three dimensions and   E
expressed in cubic units. Both capacity and volume are
used to measure empty spaces; however, capacity usually
refers to fluids, whereas volume usually refers to solids.
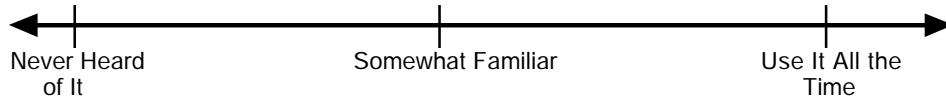
Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
   of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Weight measures that represent the force that attracts an object
to the center of Earth.   E
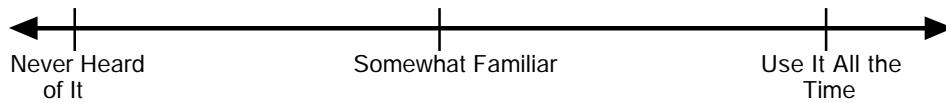
Mark on the line your knowledge of this word.

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Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

Whole numbers the numbers in the set {0, 1, 2, 3, 4, …}.   E

Mark on the line your knowledge of this word.
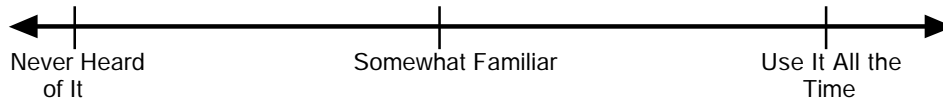
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Never Heard   Somewhat Familiar   Use It All the
of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

x-intercept   the value of *x* on a graph when y is zero (0).
The *x*-axis is the horizontal number line on a
rectangular coordinate system.

Mark on the line your knowledge of this word.

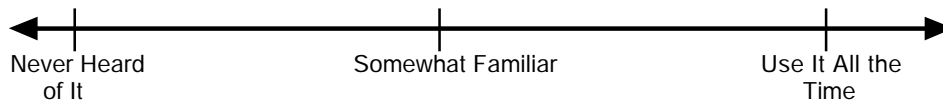Never Heard   Somewhat Familiar   Use It All the
  of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph

y-intercept   the value of *y* on a graph when x is zero (0).
The *y*-axis is the vertical number line on a
rectangular coordinate system.

Mark on the line your knowledge of this word.

Never Heard   Somewhat Familiar   Use It All the
  of It   Time

Explain in your own words	Example
Facts/Rules/Formulas	Picture or Graph