

## 6th grade unit 1 module 1 vocab

**Absolute value**

The distance of a number from zero on the number line. Always positive.

$$|-5| = 5$$

**Additive inverse**

Two numbers whose sum is 0 .

$$5 + -5 = 0$$

**Integers**

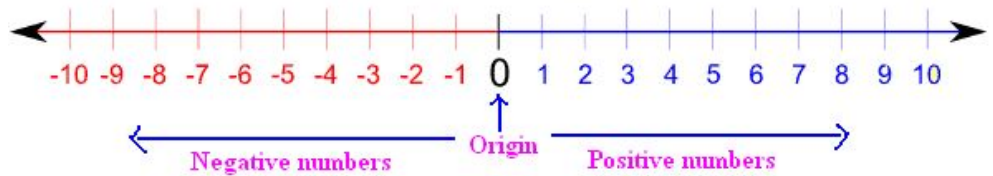
The set of numbers and their opposites.

...-5,-4,-3,-2,-1,0,1,2,3,4,5...

# 6th grade unit 1 module 1 vocab

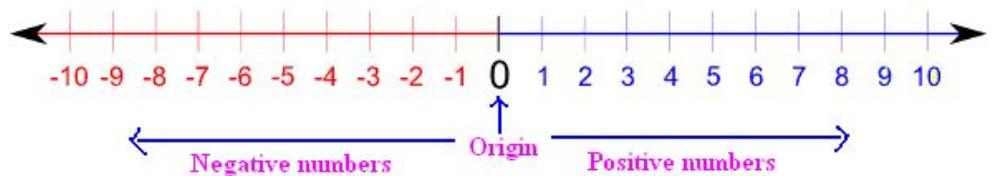
**Negative numbers**

**Numbers less than 0.**



**Positive numbers**

**Numbers that are greater than zero.**



**Signed number**

**Positive or negative number.**

# **Opposite**

**Having a different sign but the same numeral.**

**+3 and -3 are opposites.**

6th grade unit 1 module 2 vocab

**Distributive Property**

$$a \times (b + c) = (a \times b) + (a \times c)$$

And

$$a \times (b - c) = (a \times b) - (a \times c)$$

Where a,b, and c stand for real numbers.

**Greatest Common Factor  
GCF**

The largest factor of two or more numbers.

$$4=(1,2,4)$$

$$12=(1,2,3,4,6,12)$$

$$\text{GCF} = 4$$

**Least Common Multiple  
LCM**

The smallest common multiple of a set of two or more numbers.

$$6=6,12,18,24,30$$

$$8=8,16,24,32$$

$$\text{LCM} = 24$$

6th grade unit 1 module 3 vocab

**Inequality**

**A mathematical sentence that compares two unequal expressions using one of the following symbols.**

**$<$ ,  $>$ ,  $\leq$ ,  $\geq$ , or  $\neq$**

**Rational number**

**A number that can be expressed as a ratio of two integers.**

**2, -3,  $\frac{1}{4}$  0.18...**

**Whole number**

**The set of numbers 0,1,2,3,4...**

## 6th grade unit 2 module 4 vocab

<b>Common denominator</b>	<p>For two or more fractions a common multiple of the denominators. 12 is a common denominator of <math>\frac{2}{3}</math> and <math>\frac{3}{4}</math></p>
<b>Denominator</b>	<p>The quantity below the line in a fraction. It tells the number of equal parts into which a whole is divided. <math>\frac{3}{4}</math> 4 is the denominator</p>
<b>Numerator</b>	<p>The number or expression written above the line in a fraction. <math>\frac{3}{5}</math> 3 is the numerator</p>

## 6th grade unit 2 module 4 vocab

**Improper fraction**

**A fraction with a numerator greater than or equal to its denominator.**

$$\frac{5}{3}$$

**Mixed number**

**A number with an integer and a fraction part.**

$$3\frac{3}{7}$$

**Reciprocals**

**Two numbers whose product is 1.**

$$5 \times \frac{1}{5} = 1$$

6th grade unit 2 module 5 vocab

**Dividend**

**A quantity to be divided.  
(inside number)**

$$32 \overline{)528}$$

**Divisor**

**The quantity by which another quantity is  
divided.**

$$32 \overline{)528}$$



6th grade unit 3 module 6 vocab

**Rate**

**A ratio comparing two different units.**

**65 mph  
Miles to hours**

**Ratio**

**A comparison of two numbers using  
division.**

**3:2  
3 puppies to 2 kitties**

**Unit rate**

**A rate with a denominator of 1.**

**\$0.50 per ounce**

$\frac{\$0.50}{oz}$

## 6th grade unit 3 module 7 vocab

### **Proportion**

**An equation showing that two ratios are equivalent.**

$$\frac{2}{4} = \frac{4}{8}$$

### **Proportional relationship**

**A relationship between two variable quantities  $x$  and  $y$ , where  $y$  is a constant multiple ( $k$ ) of  $x$ .  $y=kx$**

$$d = rt$$

**Distance = rate  $\times$  time**

6th grade unit 4 module 9 vocab

**Exponent**

The number that tells how many equal factors there are.  
 $5^2$  the 2 is the exponent and 5 is the base.

**Order of operations**

Rules describing what sequence to use in evaluating expressions.  
**PEMDAS**

**Please Excuse My Dear Aunt Sally**

**Parenthesis, exponents,  
Multiply and Divide,  
Add and Subtract**

6th grade unit 4 module 10 vocab

**Algebraic expressions**

A group of numbers symbols, and variables that express an operation or series of operations.

$$3x + 2$$

**Coefficient**

A numerical factor in a term of an algebraic expression.

$$5x + 3$$

**Dependent variable**

In a function, a variable whose value is determined by the value of the related independent variable.

# bikes	1	2	3	4
wheels	2	4	6	8

6th grade unit 4 module 10 vocab

**Expression**

**A variable or combination of variables, numbers, and symbols that represent a mathematical relationship.**

**Evaluate**

**To find the value of a mathematical expression.**

$$42 - 13 = n$$

$$n = 29$$

6th grade unit 4 module 10 vocab

**Term**

**A number, variable, product or quotient in an expression. A term is not a sum or difference.**

$$5x + 14$$

**5x and 14 are terms.**

**Variable**

**A quantity that changes or can have different values. A symbol, usually a letter, that can stand for a variable quantity.**

$$2n + 3 = 11$$

**n is the variable.**

# 6th grade unit 5 module 11 vocab

## **Independent variable**

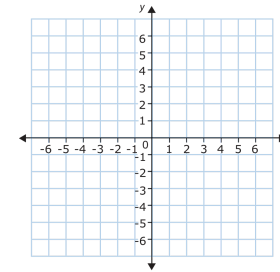
**A variable in a mathematical equation whose value determines that of a dependent variable.**

<b># bikes</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>wheels</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>8</b>

# 6th grade unit 5 module 12 vocab

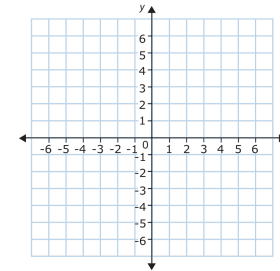
**Axis**

**A reference line from which distances or angles are measured in a coordinate grid.**



**X-axis**

**In a grid, the horizontal axis.**

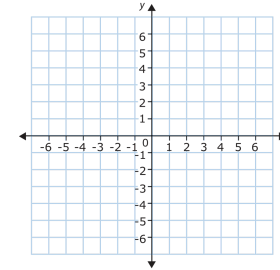




# 6th grade unit 5 module 12 vocab

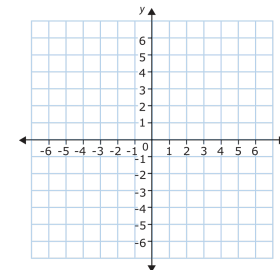
**Y- axis**

**In a grid, the vertical axis.  
(y to the sky)**



**Origin**

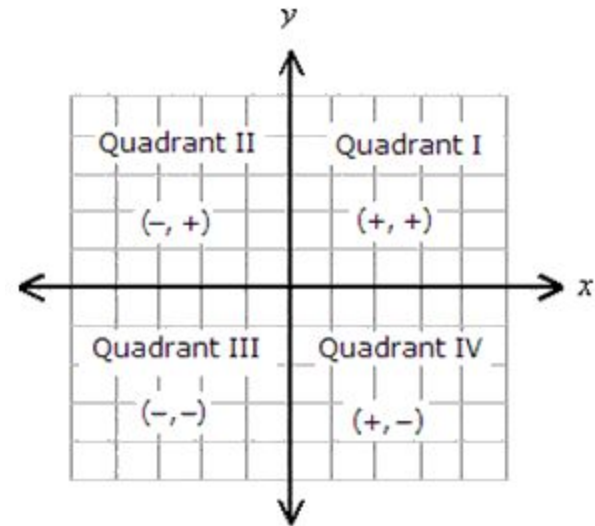
**The intersection of the x- and y-axes in a  
coordinate plane, described by the  
ordered pair (0,0)**



# 6th grade unit 5 module 12 vocab

## Quadrants

The four sections a coordinate grid that are separated by the axes.



## X-coordinate

In an ordered pair, the value that is always written first.

$(7, 2)$

7 is the x-coordinate.

6th grade unit 5 module 12 vocab

**Y- coordinate**

In an ordered pair, the value that is always written second.

$(7,2)$   
2 is the y-coordinate.

**Ordered pair**

A pair of numbers that gives coordinates of a point on a grid in this order (horizontal coordinate, vertical coordinate). Also known as a coordinate pair.

$(-5,2)$   
 $(x,y)$

**Coordinates**

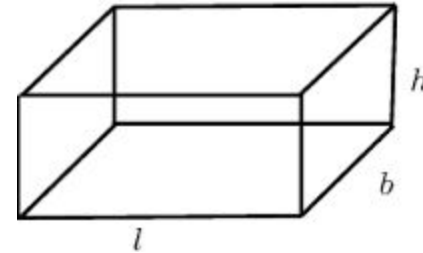
An ordered pair of numbers that identify a point on a coordinate plane.

$(3,-5)$   
 $(x,y)$

## 6th grade unit 6 module 13 vocab

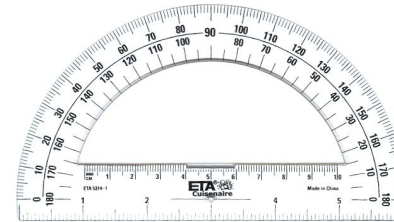
### Right rectangular prism

A prism with six rectangular faces where the lateral edge is perpendicular to the plane of the base.



### Degree

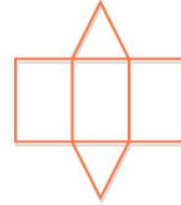
A unit for measuring angles. Based on dividing one complete circle into 360 equal parts.



# 6th grade unit 6 module 13 vocab

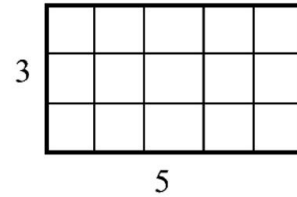
## Net

A 2-dimensional shape that can be folded into a 3-dimensional figure.



## Area

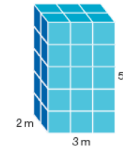
The measure, in square units, of the interior region of a 2-dimensional figure.



$$\text{area} = 3 \times 5 = 15 \text{ sq units}$$

## Volume

The number of cubic units it takes to fill a figure.

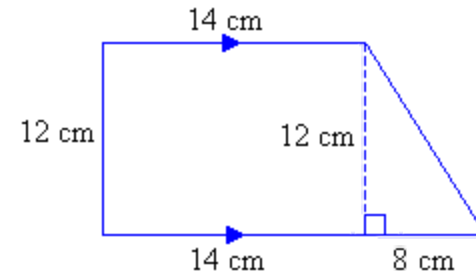


$$\begin{aligned} V &= l \times w \times h \\ V &= 3 \text{ m} \times 2 \text{ m} \times 5 \text{ m} \\ V &= 30 \text{ cubic meters} \end{aligned}$$

# 6th grade unit 6 module 13 vocab

## Composite figures

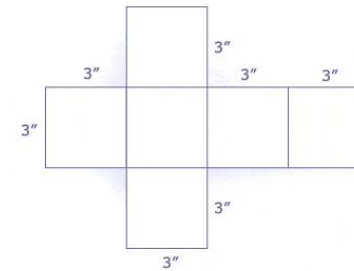
Subdividing figures into other figures to find the area.



# 6th grade unit 6 module 15 vocab

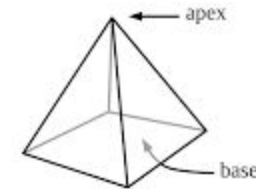
## Surface area

The total area of the faces (including the bases) and curved surfaces of a solid figure.



## Pyramid

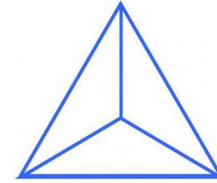
A polyhedron whose base is a polygon and whose other faces are triangles that share a common vertex.



6th grade unit 6 module 15 vocab

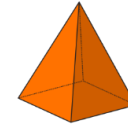
**Triangular pyramid**

**A pyramid with a triangular base.**



**Square-based pyramid**

**A polyhedron whose base is a square and whose other faces are triangles that share a common vertex.**



**Trapezoid**

**A quadrilateral with only one pair of parallel sides.**





## 6th grade unit 7 module 16 vocab

### Combination

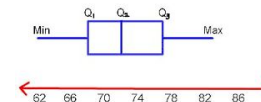
A unique set or group of objects, symbols, numbers, etc.

### Permutation

An ordered arrangement or set of elements.

### Quartile

One of three values that divides a set of ordered data into four equal parts.



# 6th grade unit 7 module 16 vocab

## Stem- and-leaf plot

Grades on a Science Test

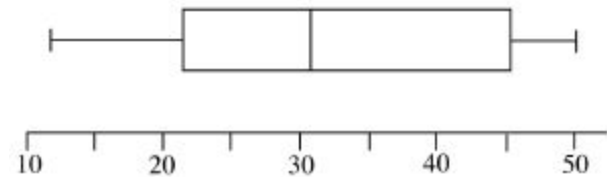
Stem	Leaf
7	2 2 4 5 6 9
8	1 4 5 7 7 9
9	0 1 3 5 8
10	0 0

Key: 7 / 2 means 72 percent

## Box plot

A diagram that shows the five number summary of a distribution.(Lowest value, lower quartile, median, upper quartile, and highest value.)

A Typical Boxplot

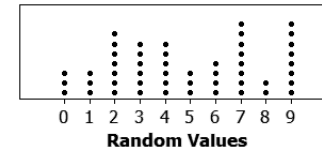


# 6th grade unit 7 module 16 vocab

## Dot plot

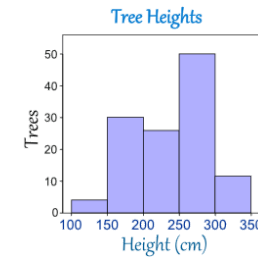
Also known as a line plot. A diagram showing frequency of data on a number line.

Dotplot of Random Values



## Histogram

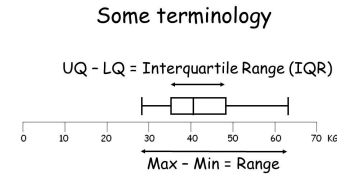
A bar graph in which the labels for the bars are numerical intervals.



# 6th grade unit 7 module 16 vocab

**Interquartile range**

**The difference between the upper quartile and the lower quartile.**



**Magnitude**

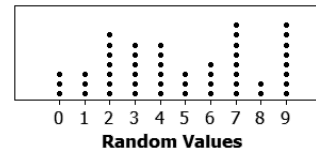
**Size**

**Larger or smaller**

**Maximum**

**The largest amount; the greatest number in a data set.**

Dotplot of Random Values

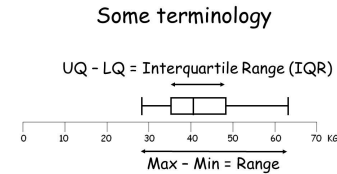


**9 is the maximum**

6th grade unit 7 module 16 vocab

**Interquartile range**

**The difference between the upper quartile and the lower quartile.**



**Magnitude**

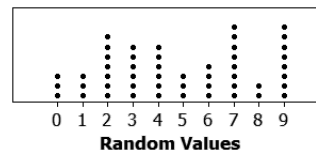
**Size**

**Larger or smaller**

**Maximum**

**The largest amount; the greatest number in a data set.**

Dotplot of Random Values



**9 is the maximum**

6th grade unit 7 module 16 vocab

**Mean**

The sum of a set of numbers divided by the number of elements in the set.  
(average)

$$(3 + 4 + 5) = 12$$
$$12 \div 3 = 4.$$

**Mean absolute deviation**

In statistics the absolute deviation of an element of a data set is the absolute difference between that element and a given point.  
**MAD**

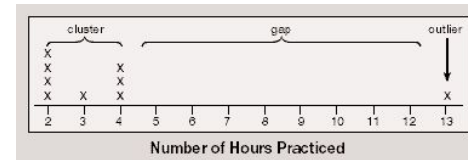
**Measures of center**

A single value that is used to represent a collection of data. Mode, mean and median. Also call measures of central tendency.

# 6th grade unit 7 module 16 vocab

## Outlier

A number in a set of data that is much larger or smaller than most of the other numbers in the set.

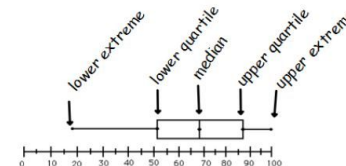


## Range

The difference between the greatest number and the least number in a set of numbers.

## Upper extreme

The greatest or largest number out of a set, usually farther away from interquartile range than other data in set.



## 6th grade unit 7 module 16 vocab

### Measures of variation

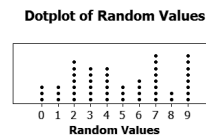
A measure of how much a collection of data is spread out. Range and quartiles.  
Also known as spread.

### Median

The middle number of a set of numbers when the numbers are arranged from least to greatest. Or the mean of two middle numbers when the set has two middle numbers.

### Minimum

The smallest amount; the smallest number in a data set.



**0 is the minimum**



