

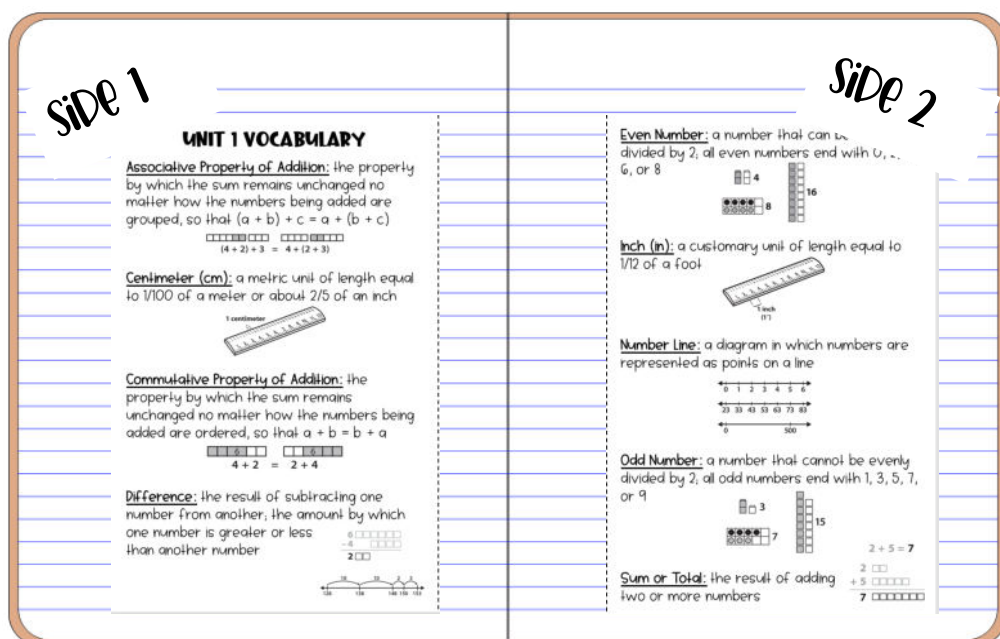


# BRIDGES GRADE 3 UNIT VOCABULARY

Student Notebook Edition for  
Interactive Notebooks/Journals

# TEACHER NOTES:

- This file contains student notebook pages for Bridges Grade 3 Math Units 1–8 vocabulary words.
- These pages are made to fit in any size notebook (composition or spiral). Simply cut on the dotted line and glue on necessary pages inside notebook.



Note: If you want to fit the whole page on a single notebook page, you will need to either print 2 copies per page OR scale the page down to 80%.

Fonts Used:

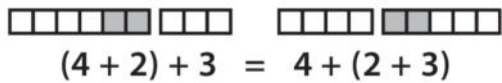
Headings: **AG ADULTISH**

Definitions: AG Can You Not

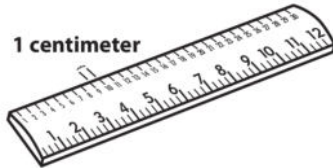


# UNIT 1 VOCABULARY

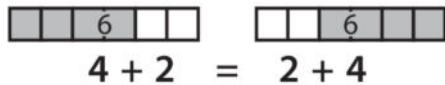
Associative Property of Addition: the property by which the sum remains unchanged no matter how the numbers being added are grouped, so that  $(a + b) + c = a + (b + c)$



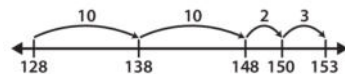
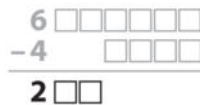
Centimeter (cm): a metric unit of length equal to 1/100 of a meter or about 2/5 of an inch



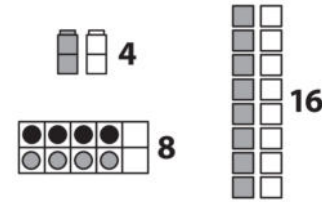
Commutative Property of Addition: the property by which the sum remains unchanged no matter how the numbers being added are ordered, so that  $a + b = b + a$



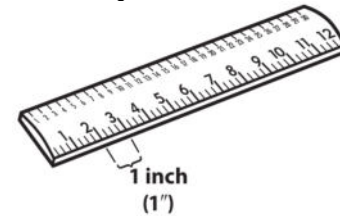
Difference: the result of subtracting one number from another; the amount by which one number is greater or less than another number



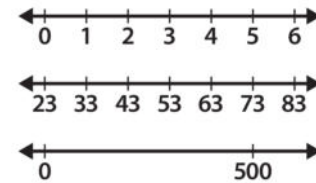
Even Number: a number that can be exactly divided by 2; all even numbers end with 0, 2, 4, 6, or 8



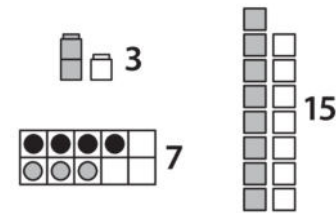
Inch (in): a customary unit of length equal to 1/12 of a foot



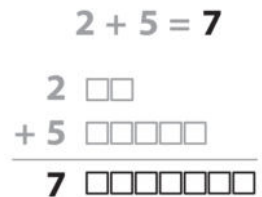
Number Line: a diagram in which numbers are represented as points on a line



Odd Number: a number that cannot be evenly divided by 2; all odd numbers end with 1, 3, 5, 7, or 9

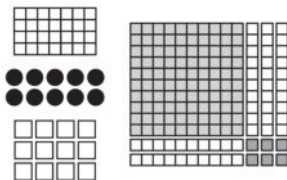


Sum or Total: the result of adding two or more numbers

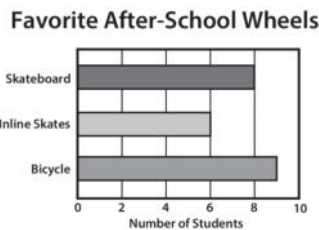


# UNIT 2 VOCABULARY

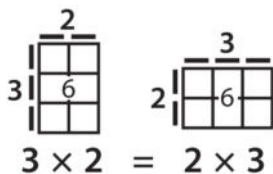
**Array:** an arrangement consisting of equal rows and equal columns



**Bar Graph:** a graph that uses horizontal or vertical bars to show frequency of data



**Commutative Property of Multiplication:** the property by which the product remains unchanged no matter how the numbers being multiplied are ordered so that  $a \times b = b \times a$



**Equation:** a mathematical statement asserting that two quantities have the same value

$$4 = 2 + 2$$

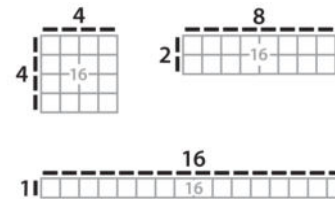
$$3 + 1 = 4$$

$$3 + 1 = 2 + 2$$

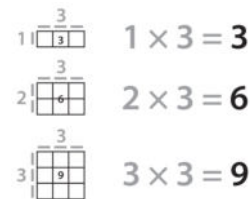
$$25 + \underline{\quad} = 40$$

$$50 = a \times 2$$

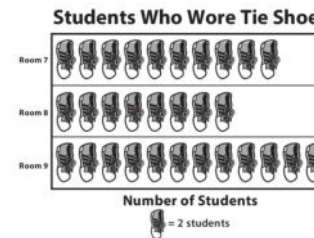
**Factor:** a whole number that divides evenly into another number



**Multiple:** a number that is the product of a given whole number and any other whole number; a number that may be divided by a given number without a remainder; for example 3, 6, and 12 are multiples of 3



**Picture Graph:** a graph that uses pictures or symbols to show frequency of data



**Product:** the result of multiplying two or more numbers; in the array model, the product is the area of the array

$$2 \times 5 = 10$$

$$\begin{array}{r} 2 \\ \times 5 \\ \hline 10 \end{array}$$

# UNIT 2 VOCABULARY CONTINUED

Ratio Table: a model that represents equivalent ratios; can be used as a tool to solve problems that involve multiplication, division, fractions, and proportions

1	2	3	5
2	4	6	10
5	15		
10	30		
15	45		
30	90		

Table: a collection of data that has been organized in columns and rows

**Birds of Prey**

Species	Length (inches)	Wingspan (inches)
Raven	27	50
Hawk	25	53
Kestrel	12	24

Variable: a quantity that can change or have different values; also a symbol (often a letter) that stands for a variable

$$x + 3$$

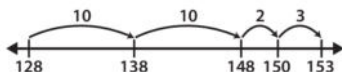
# UNIT 3 VOCABULARY

**Algorithm:** a step-by-step procedure for computing that given the correct result in every case when the steps are carried out correctly

$$\begin{array}{r} 11 \\ 35 \\ + 165 \\ \hline 200 \end{array} \qquad \begin{array}{r} 1 \\ 102 \\ \times 73 \\ \hline 306 \\ 7140 \\ \hline 7446 \end{array}$$

**Difference:** the result of subtracting one number from another; the amount by which one number is greater or less than another number

$$\begin{array}{r} 6 \square\square\square\square\square \\ - 4 \square\square\square \\ \hline 2 \square\square \end{array}$$



**Estimate:** a close guess of the actual value, usually based on some thought or rough calculation; to make an approximate or rough count, measurement, or calculation



"I think there are 110 gumballs in the machine."



**Expanded Form:** a way to write a number that shows the place value of each digit

$$349 = 300 + 40 + 9$$

**Rounding:** approximating a number to a specific place value based on the digit immediately to the right of that place value; for example, rounding \$3.82 to the nearest dollar is \$4 or rounding 63 to the nearest ten is 60



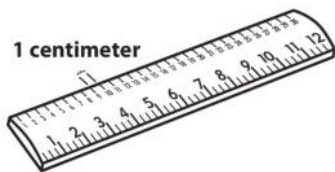
**Sum or Total:** the result of adding two or more numbers

$$2 + 5 = 7$$

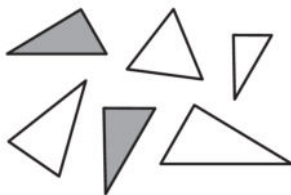
$$\begin{array}{r} 2 \square\square \\ + 5 \square\square\square\square \\ \hline 7 \square\square\square\square\square \end{array}$$

# UNIT 4 VOCABULARY

**Centimeter (cm):** a metric unit of length equal to 1/100 of a meter or about 2/5 of an inch



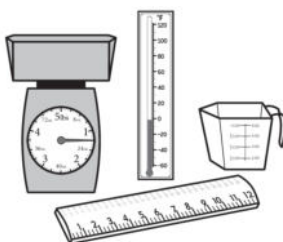
**Congruent:** of the same shape *and* size; two shapes are congruent if one can be exactly superimposed onto the other using a sequence of rotations, reflections, and/or translations



**Cup:** a customary unit of capacity equal to 8 fluid ounces

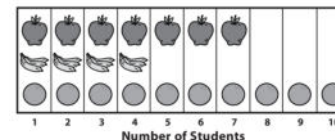


**Customary System:** the system of measurement used in the United States; includes units of measuring length, capacity, weight, and temperature



**Data:** items of information; may include facts, numbers, or measurements

21 students were asked what their favorite fruit was.  
7 students said apple, 4 said banana, and 10 said orange was their favorite.



**Denominator:** the bottom number in a fraction, which shows into how many equal parts the whole is divided; also, the divisor

$$\frac{8}{20} \quad \frac{5}{3}$$

$$\frac{1}{2} \quad \frac{3}{4}$$

**Equation:** a mathematical statement asserting that two quantities have the same value

$$4 = 2 + 2$$

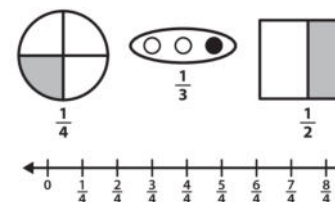
$$3 + 1 = 4$$

$$3 + 1 = 2 + 2$$

$$25 + \underline{\quad} = 40$$

$$50 = a \times 2$$

**Fraction:** a number expressed as some number of equal parts of a whole

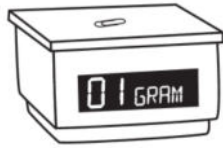


# UNIT 4 VOCABULARY CONTINUED

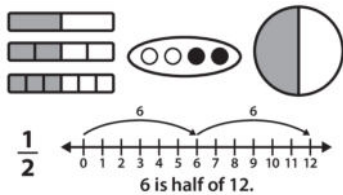
Gallon (gal.): a customary unit of capacity equal to 4 quarts or 16 cups or 128 fluid ounces



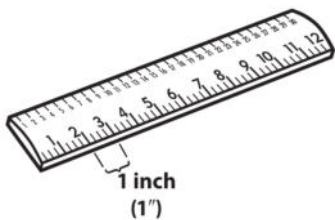
Gram (g): a metric unit of mass equal to one-thousandth of a kilogram or about the weight of a standard paperclip



Half: one part when a number, shape, or set is divided into exactly two equal parts



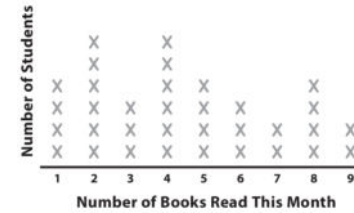
Inch (in): a customary unit of length equal to 1/12 of a foot



Kilogram (kg): a metric unit of mass equal to 1,000 grams or about 2.2 pounds



Line Plot: a horizontal number line that uses markings (such as an X or a dot) to show data points above their values on the line



Liquid Volume: the measure of the amount of liquid a container will hold



Liter (l): a metric unit of capacity equal to 1,000 milliliters or about a quart





# UNIT 4 VOCABULARY CONTINUED

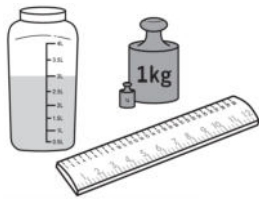
Mass: a measure of the amount of matter in an object measured in grams, kilograms, etc.



Meter (m): a metric unit of length equal to 100 centimeters or about 39 inches



Metric System: a system of measurement based on tens



Milliliter (ml): a metric unit of capacity  
Equal to one-thousandth of a liter



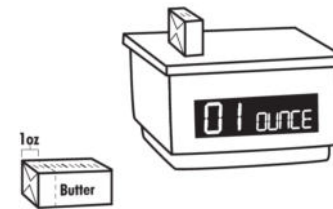
Millimeter (mm): a metric unit of length equal to one-thousandth of a meter and one-tenth of a centimeter



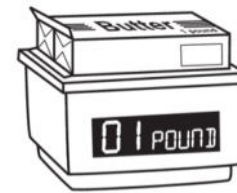
Numerator: the top number of a fraction, which shows how many equal parts are to be counted; also, the dividend

$$\frac{8}{20} \quad \frac{5}{3}$$
$$\frac{1}{2} \quad \frac{3}{4}$$

Ounce (oz.): a customary unit of weight equal to one-sixteenth of a pound



Pound (lb.): a customary unit of weight equal to 16 ounces



Quart (qt.): a customary unit of capacity equal to one-fourth of a gallon or 4 cups or 32 fluid ounces



# UNIT 4 VOCABULARY CONTINUED

Sum or Total: the result of adding two or more numbers

$$2 + 5 = 7$$

$$\begin{array}{r} 2 \quad \square\square \\ + 5 \quad \square\square\square\square \\ \hline 7 \quad \square\square\square\square\square \end{array}$$

Table: a collection of data that has been organized in columns and rows

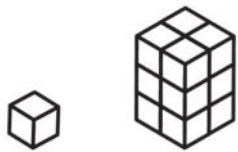
**Birds of Prey**

Species	Length (inches)	Wingspan (inches)
Raven	27	50
Hawk	25	53
Kestrel	12	24

Unit Fraction: a fraction with a numerator of 1

$$\frac{1}{a} \quad \frac{1}{814} \quad \frac{1}{3} \quad \frac{1}{23}$$

Volume: the total number of cubic units needed to fill a three-dimensional space



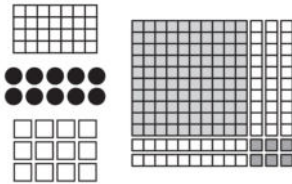
1 cubic unit    12 cubic units

# UNIT 5 VOCABULARY

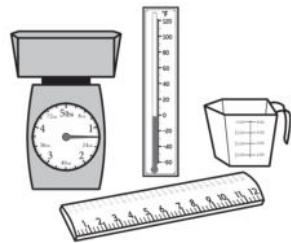
**Area:** the total number of square units needed to cover a two-dimensional surface



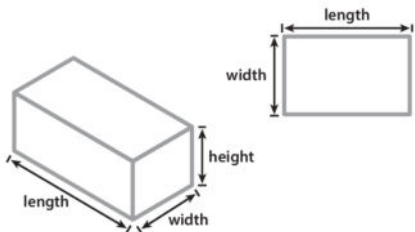
**Array:** an arrangement consisting of equal rows and equal columns



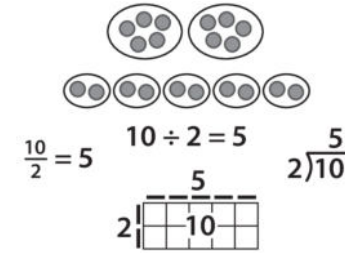
**Customary System:** the system of measurement used in the United States; includes units of measuring length, capacity, weight, and temperature



**Dimension:** the length, width, or height of a figure

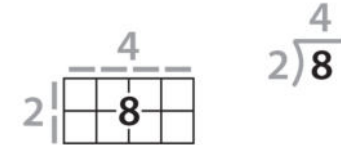


**Divide:** to break or split into equal parts; to determine how many times one number goes into another



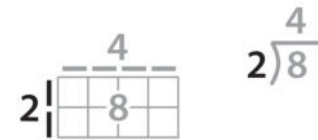
**Dividend:** the number that will be divided in a division problem

$$8 \div 2 = 4$$



**Divisor:** the number in a division problem that divides the dividend

$$8 \div 2 = 4$$



**Equal:** of exactly the same amount or value

$$15 + 25 = 40$$

$$100 = 75 + 25$$

$$20 + 5 = 30 - 5$$

$$3 \times 6 = 36 \div 2$$

# UNIT 5 VOCABULARY CONTINUED

**Equation:** a mathematical statement asserting that two quantities have the same value

$$4 = 2 + 2$$

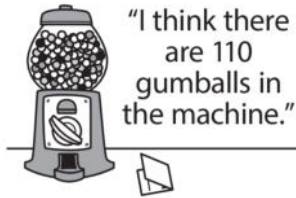
$$3 + 1 = 4$$

$$3 + 1 = 2 + 2$$

$$25 + \underline{\quad} = 40$$

$$50 = a \times 2$$

**Estimate:** a close guess of the actual value, usually based on some thought or rough calculation; to make an approximate or rough count, measurement, or calculation



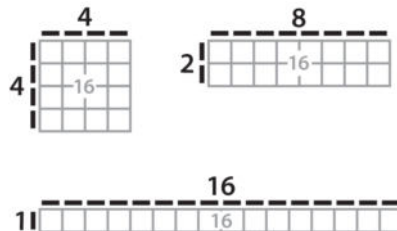
**Expression:** one or more mathematical symbols that represent a number or quantity; expression do not include equality or inequality signs

$$31 + 26$$

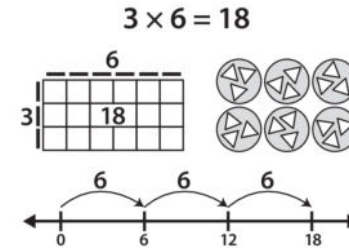
$$45 \div 9$$

$$(3 + 4) \times 8$$

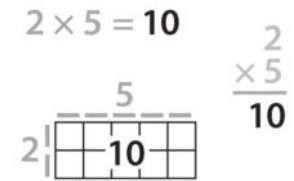
**Factor:** a whole number that divides evenly into another number



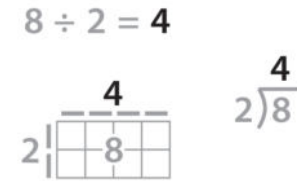
**Multiply:** to find the product of



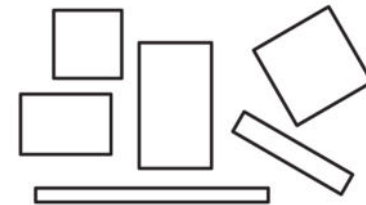
**Product:** the result of multiplying two or more numbers; in the array model, the product is the area of the array



**Quotient:** the result or answer in division; the number of times one quantity goes into another



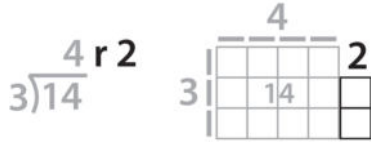
**Rectangle:** a two-dimensional (flat) shape with two pairs of parallel sides (4 sides total) and 4 right angles



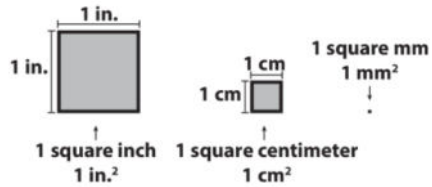
# UNIT 5 VOCABULARY CONTINUED

Remainder: the number left over when one whole number is divided by another whole number

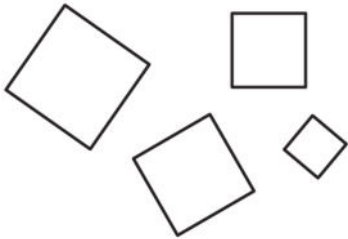
$$14 \div 3 = 4 \text{ R } 2$$



Square Unit: a square with sides that measure 1 unit, used to measure area

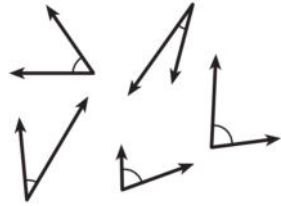


Square: a two-dimensional (flat) shape with 4 congruent sides and 4 right angles

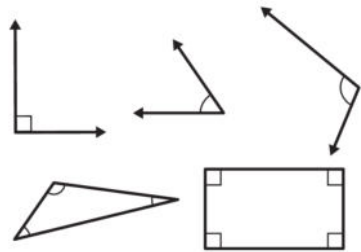


# UNIT 6 VOCABULARY

Acute Angle: an angle with a measure greater than  $0^\circ$  and less than  $90^\circ$



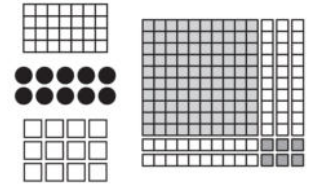
Angle: the figure formed by 2 rays or line segments that share an endpoint; often measured in terms of the amount of rotation (expressed as some number of degrees) needed to superimpose one of those rays or line segments onto the other



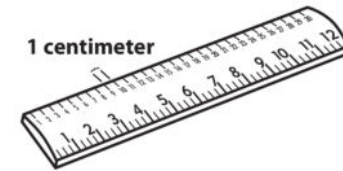
Area: the total number of square units needed to cover a two-dimensional surface



Array: an arrangement consisting of equal rows and equal columns



Centimeter (cm): a metric unit of length equal to  $1/100$  of a meter or about  $2/5$  of an inch



Congruent: of the same shape *and* size; two shapes are congruent if one can be exactly superimposed onto the other using a sequence of rotations, reflections, and/or translations

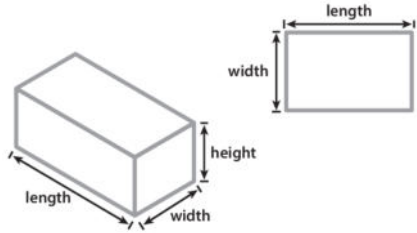


Denominator: the bottom number in a fraction, which shows into how many equal parts the whole is divided; also, the divisor

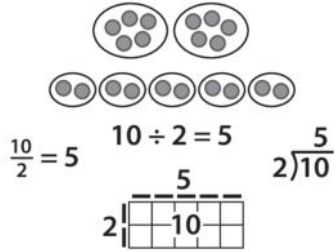
$$\frac{8}{20} \quad \frac{5}{3}$$
$$\frac{1}{2} \quad \frac{3}{4}$$

# UNIT 6 VOCABULARY CONTINUED

**Dimension:** the length, width, or height of a figure



**Divide:** to break or split into equal parts; to determine how many times one number goes into another



**Equal:** of exactly the same amount or value

$$15 + 25 = 40$$

$$100 = 75 + 25$$

$$20 + 5 = 30 - 5$$

$$3 \times 6 = 36 \div 2$$

**Equation:** a mathematical statement asserting that two quantities have the same value

$$4 = 2 + 2$$

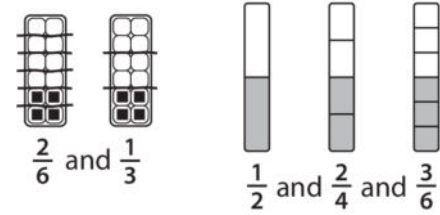
$$3 + 1 = 4$$

$$3 + 1 = 2 + 2$$

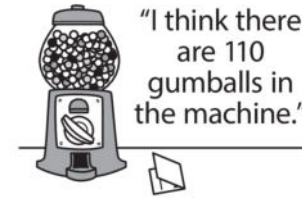
$$25 + \underline{\quad} = 40$$

$$50 = a \times 2$$

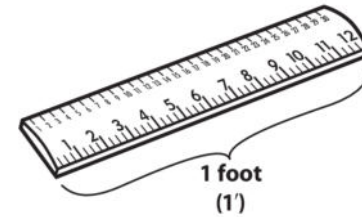
**Equivalent Fractions:** two or more different fractions that represent the same quantity



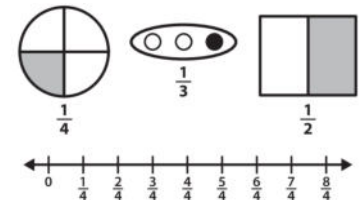
**Estimate:** a close guess of the actual value, usually based on some thought or rough calculation; to make an approximate or rough count, measurement, or calculation



**Foot (ft.):** a customary unit of length equal to 12 inches

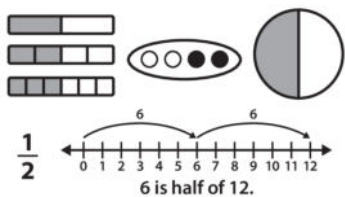


**Fraction:** a number expressed as some number of equal parts of a whole

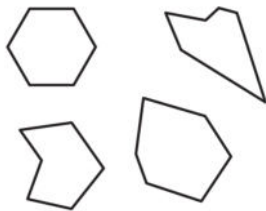


# UNIT 6 VOCABULARY CONTINUED

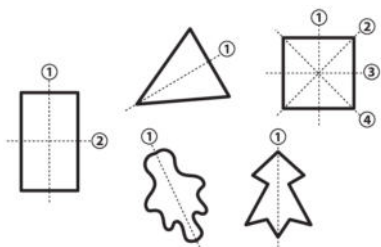
Half: one part when a number, shape, or set is divided into exactly two equal parts



Hexagon: a two-dimensional (flat) shape with 6 sides



Line of Symmetry: a real or imaginary line that divides a shape into two mirror images

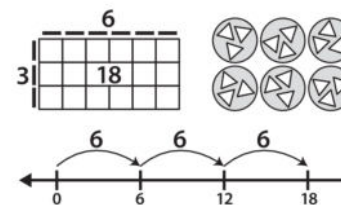


Meter (m): a metric unit of length equal to 100 centimeters or about 39 inches



Multiply: to find the product of

$$3 \times 6 = 18$$

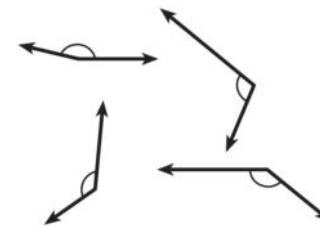


Numerator: the top number of a fraction, which shows how many equal parts are to be counted; also, the dividend

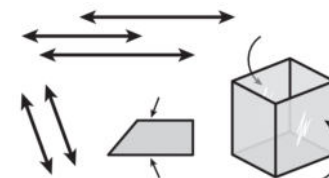
$$\frac{8}{20} \quad \frac{5}{3}$$

$$\frac{1}{2} \quad \frac{3}{4}$$

Obtuse Angle: angle with a measure great than  $90^\circ$  and less than  $180^\circ$



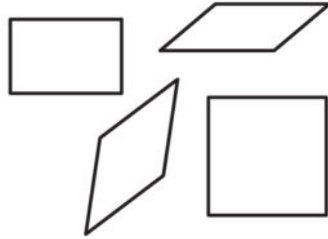
Parallel: always the same distance apart





# UNIT 6 VOCABULARY CONTINUED

Parallelogram: a two-dimensional (flat) shape with 4 sides, with both pairs of opposite sides parallel



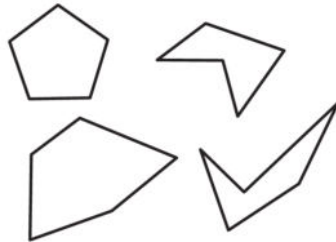
Pattern: a collection of numbers, shapes, or objects that forms a consistent or characteristic arrangement

**2, 4, 6, 8, 10, 12 ...**

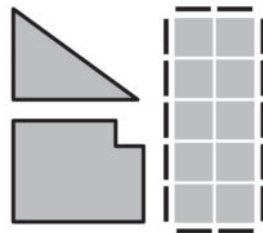


**5, 10, 15, 20, 25 ...**

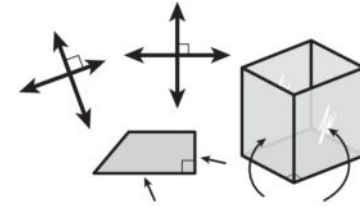
Pentagon: a two-dimensional (flat) shape with 5 sides



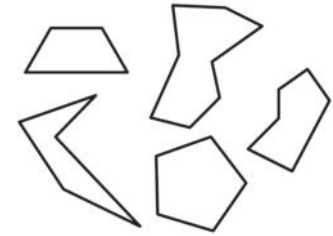
Perimeter: the distance in linear units around a two-dimensional (flat) figure; the perimeter of a circle is called the circumference



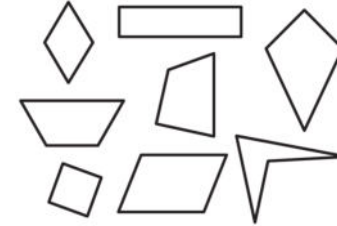
Perpendicular: intersecting at right angles



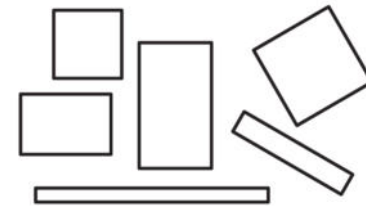
Polygon: a closed two-dimensional (flat) shape with 3 or more sides



Quadrilateral: a two-dimensional (flat) shape with 4 sides

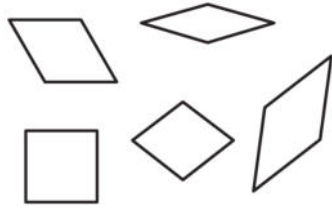


Rectangle: a two-dimensional (flat) shape with two pairs of parallel sides (4 sides total) and 4 right angles

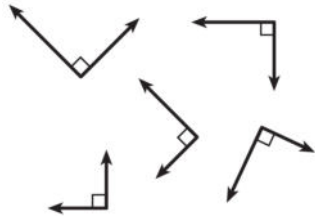


# UNIT 6 VOCABULARY CONTINUED

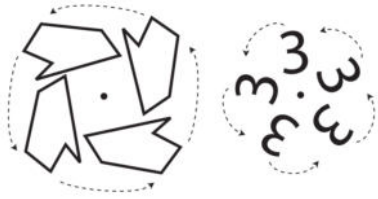
Rhombus: a two-dimensional (flat) shape with 4 congruent sides



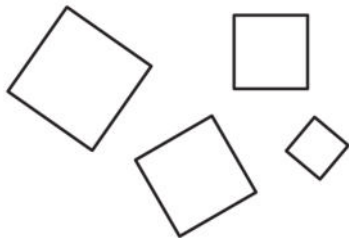
Right Angle: an angle with a measure of exactly  $90^\circ$



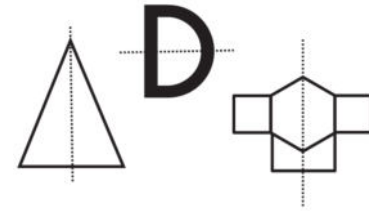
Rotation: a turn of a geometric figure



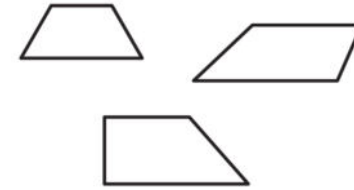
Square: a two-dimensional (flat) shape with 4 congruent sides and 4 right angles



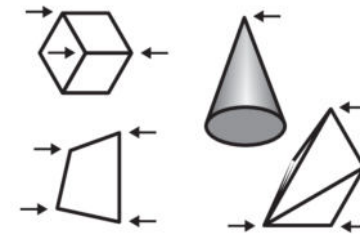
Symmetry: the property of a shape that can be folded so that the two halves match exactly



Trapezoid: a two-dimensional (flat) shape with 4 sides, exactly 1 pair of which are parallel

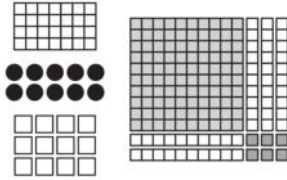


Vertex or Corner: the point at which the sides of a two-dimensional (flat) shape or the edges of a three-dimensional shape (solid) intersect

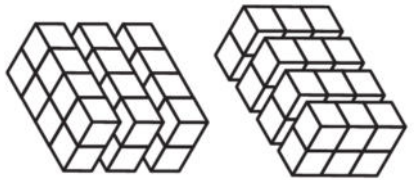


# UNIT 7 VOCABULARY

**Array:** an arrangement consisting of equal rows and equal columns



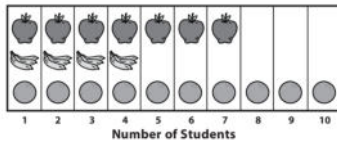
**Associative Property of Multiplication:** the property by which the product remains unchanged no matter how the numbers being multiplied are grouped, so that  $(a \times b) \times c = a \times (b \times c)$



$$(4 \times 2) \times 3 = 4 \times (2 \times 3)$$

**Data:** items of information; may include facts, numbers, or measurements

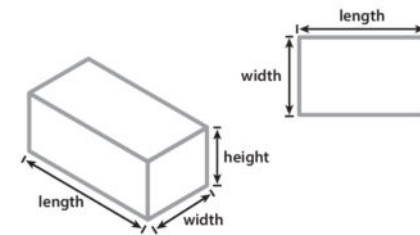
21 students were asked what their favorite fruit was.  
7 students said apple, 4 said banana, and 10 said orange was their favorite.



**Denominator:** the bottom number in a fraction, which shows into how many equal parts the whole is divided; also, the divisor

$$\frac{8}{20} \quad \frac{5}{3} \quad \frac{1}{2} \quad \frac{3}{4}$$

**Dimension:** the length, width, or height of a figure



**Divide:** to break or split into equal parts; to determine how many times one number goes into another

$$\frac{10}{2} = 5 \quad 10 \div 2 = 5 \quad 2 \overline{)10} \begin{array}{r} 5 \end{array}$$

**Equal:** of exactly the same amount or value

$$15 + 25 = 40$$

$$100 = 75 + 25$$

$$20 + 5 = 30 - 5$$

$$3 \times 6 = 36 \div 2$$

# UNIT 7 VOCABULARY CONTINUED

**Equation:** a mathematical statement asserting that two quantities have the same value

$$4 = 2 + 2$$

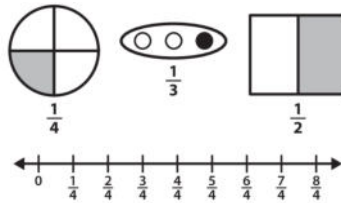
$$3 + 1 = 4$$

$$3 + 1 = 2 + 2$$

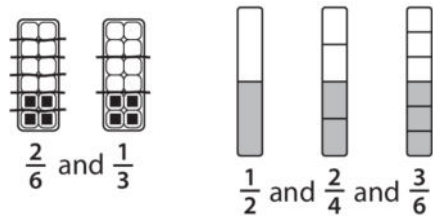
$$25 + \underline{\quad} = 40$$

$$50 = a \times 2$$

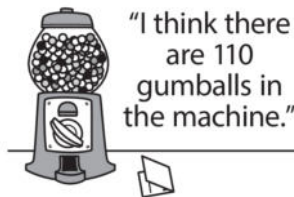
**Fraction:** a number expressed as some number of equal parts of a whole



**Equivalent Fractions:** two or more different fractions that represent the same quantity



**Estimate:** a close guess of the actual value, usually based on some thought or rough calculation; to make an approximate or rough count, measurement, or calculation



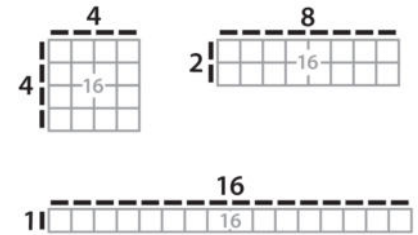
**Expression:** one or more mathematical symbols that represent a number or quantity; expression do not include equality or inequality signs

$$31 + 26$$

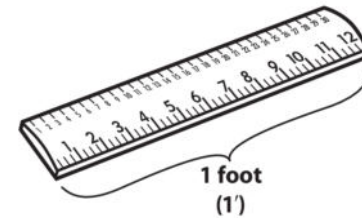
$$45 \div 9$$

$$(3 + 4) \times 8$$

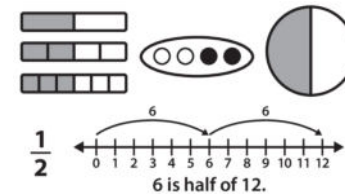
**Factor:** a whole number that divides evenly into another number



**Foot (ft.):** a customary unit of length equal to 12 inches

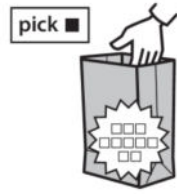


**Half:** one part when a number, shape, or set is divided into exactly two equal parts

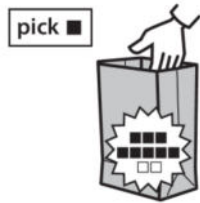


# UNIT 7 VOCABULARY CONTINUED

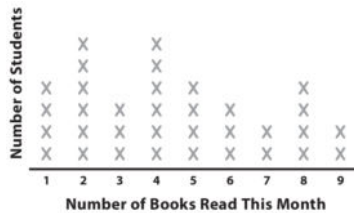
Impossible: will definitely not occur



Likely: had more than a 50% change of occurring



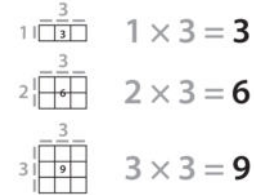
Line Plot: a horizontal number line that uses markings (such as an X or a dot) to show data points above their values on the line



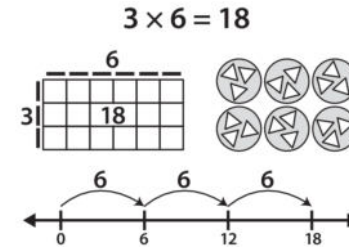
Mode: the value (or values) that appear most often in a set of data; there may be no mode, one mode, or multiple modes in a single set of data



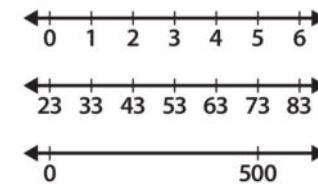
Multiple: a number that is the product of a given whole number and any other whole number; a number that may be divided by a given number without a remainder; for example 3, 6, and 12 are multiples of 3



Multiply: to find the product of



Number Line: a diagram in which numbers are represented as points on a line



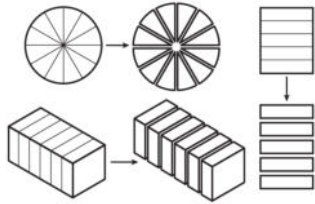
Numerator: the top number of a fraction, which shows how many equal parts are to be counted; also, the dividend



# UNIT 7 VOCABULARY CONTINUED

Parentheses: curved marks used to group mathematical symbols ( )

Partition: to divide into portions or pieces



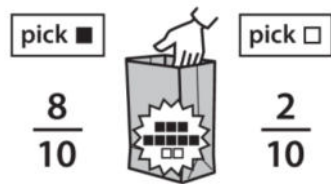
Pattern: a collection of numbers, shapes, or objects that forms a consistent or characteristic arrangement

**2, 4, 6, 8, 10, 12 ...**



**5, 10, 15, 20, 25 ...**

Probability: the likelihood that an event will occur, measured on a scale from 0 (impossible) to 1 (certain)



Product: the result of multiplying two or more numbers; in the array model, the product is the area of the array

$$2 \times 5 = 10$$
$$\begin{array}{r} 2 \\ \times 5 \\ \hline 10 \end{array}$$

Unit Fraction: a fraction with a numerator of 1

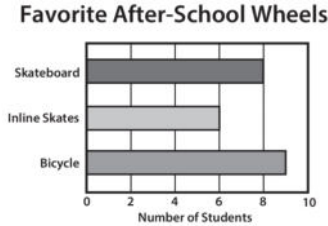
$$\frac{1}{a} \quad \frac{1}{814} \quad \frac{1}{3} \quad \frac{1}{23}$$

# UNIT 8 VOCABULARY

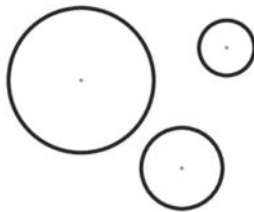
Area: the total number of square units needed to cover a two-dimensional surface



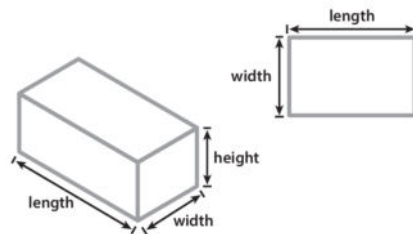
Bar Graph: a graph that uses horizontal or vertical bars to show frequency of data



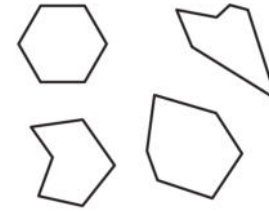
Circle: a two-dimensional (flat) shape made by drawing a curve that is always the same distance from a point called the center



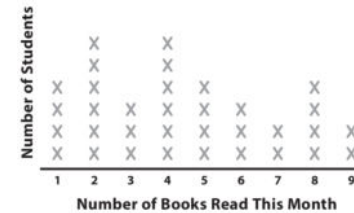
Dimension: the length, width, or height of a figure



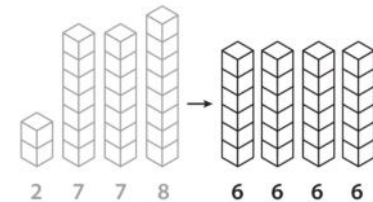
Hexagon: a two-dimensional (flat) shape with 6 sides



Line Plot: a horizontal number line that uses markings (such as an X or a dot) to show data points above their values on the line



Mean: the sum of all numbers in a data set divided by the number of data points; typically called the "average"



Median: the middle value of an ordered set of numerical data; in a set with an even number of data points, the median is the average of the two middle points

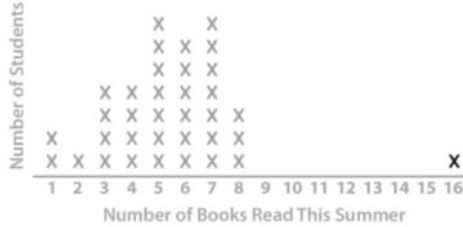
4 6 7 **8** 8 11 13

# UNIT 8 VOCABULARY CONTINUED

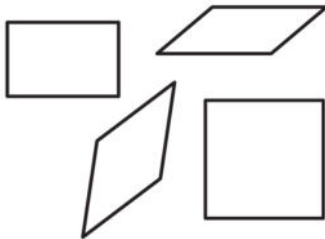
**Mode:** the value (or values) that appear most often in a set of data; there may be no mode, one mode, or multiple modes in a single set of data



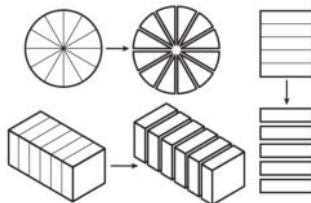
**Outlier:** a value in a set that is much higher or much lower in value than other numbers in the set



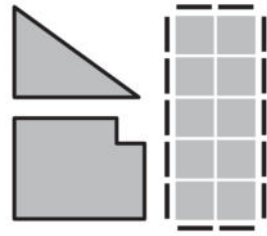
**Parallelogram:** a two-dimensional (flat) shape with 4 sides, with both pairs of opposite sides parallel



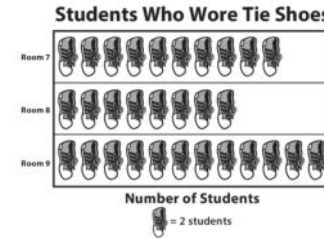
**Partition:** to divide into portions or pieces



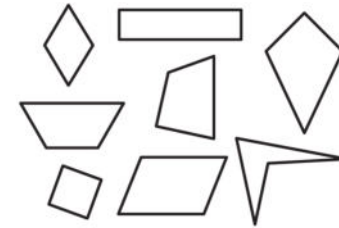
**Perimeter:** the distance in linear units around a two-dimensional (flat) figure; the perimeter of a circle is called the circumference



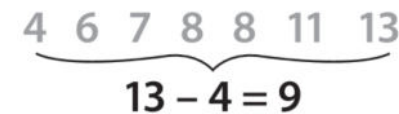
**Picture Graph:** a graph that uses pictures or symbols to show frequency of data



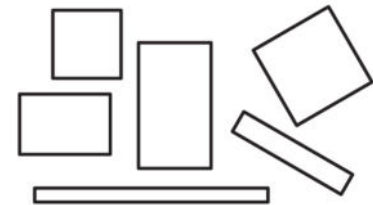
**Quadrilateral:** a two-dimensional (flat) shape with 4 sides



**Range:** the difference between the greatest and least values in a data set



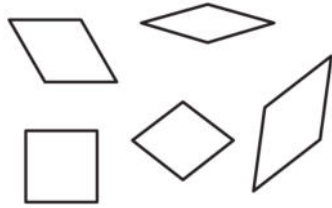
**Rectangle:** a two-dimensional (flat) shape with two pairs of parallel sides (4 sides total) and 4 right angles



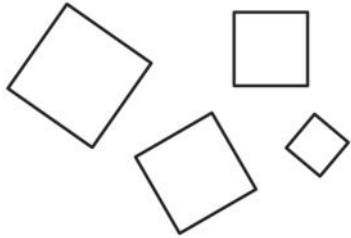


## UNIT 8 VOCABULARY CONTINUED

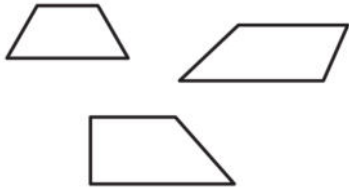
Rhombus: a two-dimensional (flat) shape with 4 congruent sides



Square: a two-dimensional (flat) shape with 4 congruent sides and 4 right angles



Trapezoid: a two-dimensional (flat) shape with 4 sides, exactly 1 pair of which are parallel



Triangle: a two-dimensional (flat) shape with 3 sides



# **ADDITIONAL VOCABULARY**

# **ADDITIONAL VOCABULARY**