## Preliminary Math 3, 4, 5 Vocabulary List

Vocabulary	Definition			
acute angle	An angle that measures between 0 degrees and 90 degrees.		х	х
acute triangle	A triangle that has three acute angles (all 3 angles measure between 0 degrees and 90 degrees).		x	х
addend	A number that is added to another number in an addition problem.	X - 3.NBT.2	х	х
addition	To join two or more numbers to get one number.	X - 3.NBT.2	х	х
algebraic expression	An expression consisting of one or more numbers and variables along with one or more arithmetic operations.		х	х
algorithm	A step-by-step problem solving procedure for solving math problems.	X - 3.NBT.2		
angle	A shape formed by two line segments or rays that share the same endpoint.	X-3.G.1	х	х
angle measurement	Angles are typically measured in degrees.		х	
area *	The measure of the number of unit squares needed to cover the surface of a two-dimensional figure.	X-3.MD5-7	х	х
area model	A model for multiplication problems, in which the length and width of a rectangle represents the factors.	X-3.MD5-7	х	
array *	An arrangement of objects in rows and columns.	X-3.0A.3	х	х
Associative Property of Addition	Grouping the addends in different ways does not change the sum. Example: 3 + (7+5) = (3+7) + 5.		х	х
Associative Property of Multiplication *	Grouping the factors in different ways does not change the product. Example: 2 x (5x6)= (2x5) x 6.	X-3.0A.5	х	х
balance	To equalize in weight or number.			х
bar graph	A graph where data is shown in bars to compare amounts, statistics, etc.	X-3.MD.3		х
base (arithmetic)	A number uses as a repeated factor.			х
base (geometry)	The base is the edge in a polygon perpendicular to the height. The bases of a prism are two congruent parallel lir	es.		х
base ten numerals	The decimal number system that has ten as its base.	х	х	
benchmark	A familiar number used as a point of reference.			х
benchmark decimals	Familiar decimals that are used as reference points.			х
benchmark fractions *	Common fractions that you can judge other fractions against. Example: 1/4, 1/2, 3/4	X-3.NF	х	х
bracket	Symbols used in pairs to group things together. Example: ( ), [ ], < $>$		х	
calculation	A mathematical determination of the size or number of something.		х	
capacity	The amount a container can hold when filled.	X3.MD.2	х	х
category	A collection of things sharing a common attribute.		х	
Celsius	A metric scale used for measuring temperature.			х
centimeter	A metric unit used to measure length or distance.		х	х
classify	Sort into categories or arrange into groups according to similar attributes.		х	
closed figure	A figure that begins and ends at the same point.			х
common denominator	A shared multiple of the denominators of two or more fractions.			х
common factor	A number that is a factor of two or more numbers.			х
common multiple	A number that is a multiple of two or more numbers.			х
Commutative Property of Addition	When the order of two addends is changed, the sum will be the same. Example a + b = b + a		х	х
Commutative Property of Multiplication *	When the order of two factors is changed, the product will be the same. Example: a x b = b x a	X-3.0A.5	х	х
compare *	Examine numbers to decide if one is greater/less than the other (s) or if numbers are equal.	X-3.NF.3	х	
compatible numbers	Numbers that are easy to compute mentally (friendly numbers).			х
composite number	Numbers having three or more factors Example: 6 because it has four factors: 1,2,3,6.		х	Х
computation algorithm	A set of predefined steps that gives the correct result in every case when steps are carried out correctly.		х	
concrete models	Using concrete objects to model problems.		х	
cone	A three-dimensional shape with only one vertex having a circular base.			х
congruent	Having the same size and shape.			х

В

С

А

convert	To change one unit to another. Example: 1 cm = 10 mm		х	
coordinate grid	A grid formed by a horizontal line (x-axis) and a veritcial line (y-axis).			х
coordinate point	A point placed on the coordinate grid.			х
cube	A three dimensional figure (rectangular prism) with six congruent square faces.		х	х
cubic unit	Units used for measuring volume.		х	х
cup ©	A customary unit used to measure capacity. Example: 8 ounces=1 cup		х	х
cylinder	A three-dimensional shape with two congruent parallel circular bases joined by a curved surface.		х	х
data	Collected information.	X-3.MD.3	х	х
decagon	A polygon with 10 sides and 10 angles.	X-3.MD.8		х
decagonal prism	A three dimensional firgure with two decagonal bases and ten rectangle faces.			х
decimal	A number with one or more digits to the right of the decimal point.		x	х
decimal notation	A representation of a fraction or other real number using the base ten and consisting of any digits 0-9, and a decim	nal point.	х	
decimal point	A symbol used to separate whole numbers from the fractional parts.	•	х	х
decimeter	metric measurement 1/10 of a meter= 1 decimeter.		х	х
decompose *	Exchanging one 100 for ten 10s or one 10 for ten 1s.	X-3.OA/3.NBT	x	
degree	A unit used to measure angles and temperature.		х	х
decameter	Metic measurement 10 meters= 1 decameter.			х
denominator *	The bottom number in a fraction that shows the total number of equal parts in the whole.	X-3.NF	x	х
diagonal	A line segment that connects two non-adjacent vertices.		x	х
difference	What is found when one number is subtracted from another.	X-3.NBT.2	x	х
digit	Any one of ten synbols used to write numbers (0,1,2,3,4,5,6,7,8,9).	x	x	х
dimension	A measure in one direction.			х
Distributive Property *	For all real numbers a. b. and c. a x (b+c)= a x b + a x c.	X-3.0A.5	x	х
divide	To separate into equal groups, opposite of multiplication.	X-3.0A	x	х
dividend	The larger number that is going to be divided into smaller equal groups by the divisor.	X-3.OA	x	х
division *	The process of dividing- separating into equal parts.	X-3.OA	x	х
divisor	The number that divides the dividend (outside-sits on the visor).	X-3.OA	x	х
edge	The line segment where two faces of a solid figure meet.		x	х
elapsed time *	Time spent while an event is occurring. Example: 1 PM to 2:30 PM = 1 and a 1/2 hours of elapsed time.	X-3.MD.1	x	
endpoint	The point at which a line ends or begins.		x	х
equal to	Having the same value.	x	x	х
equation *	A statement showing the equality of two expressions. A number sentence with an equal sign.	x	x	х
equilateral triangle	A triangle with three congruent sides and angles.	1	x	х
equivalent *	Having the same value.	X-3.NF.3	x	х
equivalent decimals	Decimals that name the same amount.			х
equivalent fractions *	Fractions that name the same amount or part.	X-3.NF.3	x	х
estimate (noun)	A number close to an exact amount.		x	х
estimate (verb)	To find the approximate value or measurement of something.	X-3.MD.2	x	х
evaluate	To find the value of an algebraic or numerical expression.		x	х
even	A whole number that has a 0,2,4,6,8 in the ones place.		x	х
expanded form	A way to write numbers by showing the place value of each digit. Example: 254= 200+50+4	X-3.NBT.1	x	х
exponent	A number that gives reference to the repeated multiplication required.			х
expression	A mathematical phrase that combine numbers, operation, or vairable but does not have an equal sign.		x	х
face	The flat surface of a solid figure that is formed by the edges of a three-dimensional object.		x	x
fact family	A set of related equations multiplication and divison or addition and subtraction.	X-3.0A	x	x
factor *	A number multiplied by another number to find a product.	X-3.0A	x	х

factor pairs	A pair of two numbers that multiply together to be a specific third number. Example: 30 is {5,6}, {10,3}, {15,2}		х	
factorization	The process of finding the factors of a given number.			х
Fahrenheit	A customary scale for measuring temperature.			х
fluid ounce	A customary unit used to measure liquid capacity (8 ounces=1 cup).		х	х
foot	A customary unit used to measure length (12 inches =1 foot).		x	х
formula	A set of symbols that expresses a mathematical rule. Example: $P =  +w+ +w  A =  x w $		x	х
fraction *	A number that names a part of a whole or a part of a group.	x- 3.NF	x	х
fraction greater than 1	A fraction that has a numerator greater than its denominator.		x	х
gallon	A customary unit to measure capacity (4 quarts=1 gallon).		x	х
geometric shapes	Regular polygons including square, triangle, pentagon, etc.		x	
gram	A metric unit used to measure mass (1,000 grams=1 kilogram).	X-3.MD.2	x	Х
greater than	A symbol (>) used to compare two numbers or quantities largest comes first.	X-3.NF.3d	x	Х
greater than or equal to	A symbol used to compare two numbers or quantities the first is greater than or equal to the second.		x	Х
greatest common factor	The largest number common to each set of factors that divides both numbers exactly. Example: GCF of 10 and 20	is 10.		У
half of/halves *	One of two equal parts of a whole.	X-3.NF/G.2	x	
height	The length of a perpendicular line from the base to the top of a 2-D or 3-D shape.		x	У
heptagon	A polygon with seven sides and seven angles.	X-3.MD.8		У
hexagon	A polygon with six sides and six angles.	X-3.MD.8	x	2
hexagonal prism	A three dimensional shape with two hexagonal bases and six rectangular faces.			2
horizontal	Extending left and right.	X-3.MD.3	x	У
hour	Unit for measuring time. Example: 60 minutes = 1 hour	X- 3.MD.1	x	
hundredth	One of 100 equal parts.		x	2
identify	Locate/find the correct response, information, or solution.			
Identity Property of Addition	When you add zero to any number the result is that number.		x	2
Identity Property of Multiplication	The product of any number and 1 is that number.		x	2
illustrate	Explain or make something clear by using pictures, charts, examples, etc.		x	
improper fraction	Fraction in which the numerator is greater than or equal to the denominator.			
inch	A customary unit used to measure length or distance (12 inches=1 foot).	X-3.MD.4	x	2
inequality	Not being of equal value/ a number sentence using one of the following symbols $\langle . \rangle, \langle . \rangle$ or $\neq$			У
integer	Whole numbers, positive or negative, including zero,			2
intersect	Lines intersect when they cross.		x	
intersecting lines	Two lines with only one point in common.		x	,
interval	The difference between one number and the next on the scale of a graph.			у
inverse operations	Opposite operations- operations that undo each other.		x	,
isosceles triangle	A triangle with two congruent sides and two congruent angles.		x	y
kev	The part of a map or graph that explains the symbols.	X-3.MD.3	x	,
kilogram	A metric unit used to measure mass (1 000 grams=1 kilogram)	X3 MD 2	x	y
kilometer	A metric unit used to measure length or distance (1 000 meters=1 kilometer)		x	,
lateral face	Any surface of of a polyhedron other than the base			,
least common denominator	The least common multiple of two or more denominators and LCD is needed when adding or subtracting fractions			,
least common multiple	The smallest number that is a common multiple of two or more numbers.	-		,
length	The measure of how long something is	X-3 MD 4	x	
less than	A symbol (<) used to compare two numbers (the smaller number is on the left).	X-3 NF 3d	x	,
less than or equal to	A symbol used to compare two numbers or quantities the first is less than or equal to the second	A 5.141.30	x	л х
line	A straight path in a plane, extending in opposite directions with no endpoint. Example: <>		x	x
line graph	A graph that uses line segments to show how data changes over time		~	s a
mie Diebii	. Draph that area me achients to show how data changes over time.			1

G

н

Т

К

L

line plot	A graph that shows frequency of data along a number line.	X-3.MD.4	х	Х
line segment	A part of a line that includes two endpoints. Example:		х	х
line symmetry	A line that divides a figure into two equal parts.		х	х
linear unit	A measure of length, width, height, or distance.			х
liquid volume	The measurement of liquids or their containers.	X-3.MD.2	х	х
liter	A metric unit used to measure capacity (1 Liter=1,000 milliliters).	X-3.MD.2	x	х
lowest terms	A fraction is in lowest terms when the only common factor of the numerator and denominator is one.			
mass	The amount of matter in an object.		х	х
mean	Also called average- Add up the the series of numbers and divide the sum by the number of values.			х
measure	To find size, length or amount of something.	X-3.MD.2	х	
median	The middle number- When numbers are listed in sequential order it is the number in the middle.			х
meter	A metric unit used to measure length or distance (1,000 mm= 1 m).		х	х
mile	A customary unit used to measure length or distance (5,280 ft=1 mile).		х	х
milligram	A metric unit used to measure mass (1,000 milligrams= 1 gram).			х
milliliter	A metric unit used to measure capacity (1 Liter=1,000 milliters).		х	х
millimeter	A metric unit used to measure length or distance (1,000 millimeter=1 meter).		х	х
million	1,000 thousands		х	х
minute	Unit for measuring time. Example: 60 minutes = 1 hour.	X-3.MD.1	х	
mixed number	A number made up of a whole number and a fraction.		x	х
mode	The most frequently seen number in a series.			х
multi-digit number	A numeral made up of two or more digits.		x	
multiple	Numbers that are products of a given number. Example: 6: 6. 12. 18. 24. 30		х	х
multiplication *	The process that combines equal-sized groups as opposed to repeated addition. Example: 5x3=5+5+5	X-3.0A	x	х
multiply	Combining of equal groups, the opposite of division.	X-3.0A	x	x
nonagon	A polygon with nine sides and nine angles.	X-3.MD.8		x
not equal to	A symbol indicating one quantitiv is not equal to the other.			x
number line	A line in which points all correspond to numbers.	X-3.MD.1	x	x
number sentence	Writing an equation or expression horizontally.	X 5111511	x	
numeration	The action or process of calculating or assigning a number to something		x	
numerator *	The top number of a fraction that represents a portion or part of the denominator.	X-3 NF	x	x
numerical expression	A mathematical phrase that uses only numbers and onerations	7. 5.1.1	x	x
obtuse angle	An angle whose measure is greater than $90^{\circ}$ and less than $180^{\circ}$		x	x
octagon	A nolygon with eight sides and eight angles	X-3 MD 8	x	x
octagonal prism	A three dimensional figure with two octagonal bases and eight rectangular faces	X 5.WD.0	~	x
odd	A whole number that has 1, 3, 5, 7, or 9 in the ones place		x	x
open figure	A figure that does not begin and end at the same noint		~	x
operations *	A light char does not begin and end at the same point.	X 2 0 4 8	v	л
order of operations	Special set of rules that give the order in which calculations are done in an expression (DEMDAS)	X-3.UA.8	~	v
ordered pairs	A pair of numbers used to locate a point on a grid, the first number talls y axis and the second talls y axis		^	л v
origin	A pair of numbers used to locate a point of a grid, the first number tens x-axis and the second tens y-axis. The point where the two axes of a coordinate plane intersect (0.0)			A V
	A sustemary unit used to measure weight $(16 \text{ subsect} = 1 \text{ pound})$		v	A V
ounce	A customary unit used to measure weight (10 ounces- 1 pound).		X	A V
	An estimate that is greater than the exact and are churses the same distance exact.	¥ • • •	v	X
	A guadrilateral whose encoding sides are parallel as discussed.	X-3.G.1	x	X
parallelogram *	A quadrilateral whose opposite sides are parallel and congruent.	X-3.G.1	x	X
parentheses	i ne symbols used to snow which operations in an expression should be done first (brackets).	X-3.0A.5	х	х
partial product	Multiplying the ones, tens, hundreds ,etc separately, then the products are added togther.		х	х

0

partial quotient	Dividing by subtracting multiples of the divisor from the dividend and then quotients are added together.			х
pattern	A repeated, growing sequence according to a rule.	X-3.0A.9	х	х
pentagon	A polygon with five sides and five angles.	X-3.MD.8	х	х
pentagonal prism	A three dimensional figure with two pentagonal bases and five rectangular faces.			х
pentagonal pyramid	A pyramid with a pentagonal base and five trangular faces.			х
perimeter *	The distance around a closed figure.	X-3.MD.8	х	х
period	Each group of three digits separated by commas in a multi digit number.		х	х
perpendicular lines	Two lines that cross at exactly 90° or right angles.		х	х
picture graph	A graph that displays countable data with symbols or pictures.	X-3.MD.3		х
pint	A customary unit used to measure capacity (2 cups =1 pint).		х	х
place value	The value of each digit in a number based on the location of the digit.	X-3.NBT.1	х	х
plane	A flat surface that extends without end in all directions.	X-3.MD.5		х
point	An exact location in space.	x-3.MD.1/3.N	FX	х
polygon	A closed plane figure formed by three or more line segments. Example: triangle, square, rectangle.	X-3.MD8	х	х
polyhedron	A solid figure with faces that are polygons.			х
pound	A customary unit used to measure weight (16 ounces= 1 pound).		х	х
prime number	A number that has exactly two factors: 1 and itself. Example: 13 has only 13 and 1 as factors.		х	х
prism	A solid figure that has two congruent polygon shaped bases, and the other faces are all recatangles.		х	х
product *	The answer to a multiplication problem.	X-3.0A	x	х
protractor	A tool used for measuring and drawing angles.		х	х
pyramid	A solid figure with a polygon base and all other faces are traingles that meet ata a common vertex.		х	х
quadrilateral	A polygon with four sides and four angles.	X-3.G.1	х	х
quantity	Certain number or amount of something.	X-3.NF.1	x	
quart	A customary unit used to measure capacity (2 pints= 1 quart).		x	х
quotient *	The solution to a division problem.	x-3.0A	х	х
range	The difference between the greatest and least numbers in a group.			х
ray	A part of a line, it has one endpoint and continues in one direction.		х	х
reasonableness	Validating a solution by comparing it to an estimated result.	X-3.0A.8	х	х
rectangle	A parallelogram with four right angles.	X-3.G.1	x	х
rectangular prism	A three dimensional figure where all six faces are rectangles.		х	х
rectangular pyramid	A pyramid with a rectangular base and four triangular faces.			х
regroup/rename	To exchange amounts of equal value to rename a number.	X3.NBT.2	х	х
regular polygon	A polygon in which all sides are congurent and all angles are congruent.			х
related facts	A set of related number sentences (4x7=28 and 28÷7=4).	x-3.0A		х
remainder	The amount left over when a number cannot be divided equally.		х	х
represent	When numbers, letters, pictures, symbols,stand for an amount, value, or solution			
rhombus	A parallelogram with four congruent sides.	X-3.G.1	х	х
right angle	An angle that forms a square corner and measures 90°.	X-3.G.1	х	х
right triangle	A triangle that has a right angle.		х	х
rounding	To replace a number with one that is approximately the same size.	X-3.NBT.1	х	х
scale	Relationship between measurements on a drawing/ model and the measurements of the real object.	X-3.MD.3		х
scalene triangle	A triangle with no congruent sides or angles.		x	х
second	A small unit of time (60 seconds= 1 minute).		x	х
sequence	An ordered list of numbers that are in a special order. Example: 2, 4, 8, 16, 32.		x	х
simplest form *	A fraction where the numerator and denominator have only 1 as the common factor.		х	х
skip count	A pattern of counting forward or backward.	X-3.0A.9	х	х

	solid figure	A figure having length, width, and height.		x	х
	solution	A value that makes an equation true.		x	х
	sphere	A solid figure whose curved surface is the same distance from the center to all its points.		х	х
	square	A polygon with four congruent sides and four right angles.	X-3.G.1	x	х
	square pyramid	A solid figure with a square base and four triangular faces that have a common vertex.			х
	square unit *	A unit used to measure area- such as square feet (ft2) or square meter (m2).	X-3.MD.5	х	х
	standard form	A way to write numbers by using the digits 0-9, with each digit having a place value.		х	х
	straight angle	An angle whose measure is 180°.		х	х
	subtraction	Take one quantity away from another.	X-3.NBT.2	x	х
	sum	The answer to an addition problem.	X-3.NBT.2	х	х
	symbol	An image used instead of words. Example: Use + instead of plus.	X3.NF.3d	х	
т	tablespoon	A customary unit used to measure capacity (3 teaspoons=1 Tablespoon).			х
	tally table	A table that uses tally marks to record data.	X-3.MD.3		х
	tape diagram	Visual models that use rectangles to represent quantities in an equation.		х	х
	teaspoon	A customary unit used to measure capacity (3 teaspoons=1 Tablespoon).			х
	tenth	One of ten equal parts (1/10).		х	х
	term	A number in a sequence.			х
	thousandth	One of one thousand equal parts (1/1,000).		х	х
	three-dimensional	Measured in three dimensions- length, width, and height.		х	х
	ton	A customary unit used to measure weight (2,000 pounds= 1 Ton).		х	х
	trapezoid *	A quadrilateral with exactly one pair of parallel sides.	X-3.G.1	х	х
	triangle	A polygon with three sides and three angles.	X-3.MD.8	х	х
	triangular prism	A solid figure that has two triangular bases and three rectangular faces.			х
	triangular pyramid	A pyramid that has a triangular base and three triangular faces.			х
	two-dimensional	A figure that lies in a plane- having length and width but not height.	X-3.MD.5		х
U	underestimate	An estimate that is less than the exact amount.			х
	unit	A quantity used as a standard of measurement.	X-3.MD.5a	х	
	unit cube	A cube that has a length, width, and height of 1.		х	х
	unit form	Expressing numbers in words and numbers. Example: 423= 4 hundred+ 2 tens + 3 ones.		х	
	unit fraction *	A fraction that has 1 as a numerator.	X-3.NF.1&2		х
	unit square	A square whose sides have a length of 1.	X-3.MD.5a	х	
V	values	A numbers worth. The meaning of a number.	X-3.NBT.1		
	variable	A letter or symbol that stands for an unknown number or numbers in an equation.		х	Х
	vertex	The point where two or more rays or line segments meet.		х	х
	vertical	Extending up and down.	x-3.MD.3	х	х
	volume	The amount of space a three-dimensional object occupies. Measured in cubic units.	X-3.MD.2	х	х
W	whole number	A whole number that doesn't contain a fraction. Includes 0, 1, 2, 3, 4	x-3.OA/3.NBT	х	х
	word form	A way to write numbers in standard English.		х	Х
Х	x-axis	The horizontal number line on a coordinate plane.	X-3.MD.3		Х
	x-coordinate	The first number in a ordered pair, tells how far to move left or right from (0,0).			х
Y	yard	A customary unit used to measure length or distance (3 feet= 1 yard).		х	х
	y-axis	The vertical number line on a coordinate plane.	X-3.MD.3		х
	y-coordinate	The second number in an ordered pair, tells how far to move up or down from (0,0).			х
Z	Zero Property of Multiplication	The property that states- when you multiply by zero the product is zero.		х	х
	Analog clock	a clock that is not digital	X- 3.MD.1		

attribute	characteristics that define an object	X- 3.G.1
am	time between midnight and noon	X- 3.MD.1
altogether	a total	X-3.OA/NBT
axis	vertical or horizontal scale on a graph	X-3.MD.3
column	in an array	X-3.0A.3
compose *	to change 10 smaller units for 1 of the next larger units on the place value chart	X-3.OA/NBT
decompose *	break an object apart into smaller parts	X-3.0A./MD
eighth	one of 8 equal parts of a whole	X-3.NF
equal groups *	with reference to multiplication/division, one factor is the # of objects in a group and the other is a multiplier that indicates the number of groups	X-3.0A.3
equal parts *	pieces of the whole that are the same size	x-3.G.2
fourth	one of 4 equal parts of the whole	X-3.NF
fractional unit *	half, third, fourth, sixth, eighth	X-3.NF/G.2
tally mark	a mark used to record data on a tally table	X-3.MD.3
half hour	unit of time equal to 30 minutes	X-3.MD.1
half way	with reference to a number line, the midpoint betweem two numbers	X-3.MD/NF
metric system	system used for measuring length and capacity	X-3.MD.2
time	a measure intervals of events	X-3.MD.1
repeated addition *	adding the same number over again	X-3.0A
strategy *	a method for solving a given problem	
pm	the time between noon and midnight	X-3.MD.1
partition	divide a whole into equal parts	x-3.G.2
thirds	one of three parts of a whole	x-3.G.2