**Unit 1: One Variable Equations and Inequalities Vocabulary**

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| **Vocabulary Word** | **Definition** |
| Algebraic Expression | A mathematical phrase that can include numbers, variables, and operation symbols |
| Coefficient | a number that is multiplied by a variable |
| Constant | a value that does not change |
| Distributive Property | For every real number a, b, and c: a(b + c) = ab ac and a(b - c) = ab - ac. |
| Equivalent Expression | expressions that have the same value for all the values of the variables |
| Integers | whole numbers and their opposites |
| like term | Like terms have identical variables; that is, they have the same variable to the same power. Constants are classified as like terms as well. |
| Order of Operations | a rule used for evaluating expressions which establishes the order in which operations should be done |
| Simplify | to write a fraction or expression in simplest form |
| Substitute | to replace a letter with a number or algebraic expression |
| Term | parts in an expression that are added or subtracted |
| Variable | letter that represents an unknown number |
| Algebraic Equation | A mathematical sentence that can include numbers, variables, operations symbols, and an equal sign. |
| Identities | An equation that is true for every value. "Infinite Solutions" |
| Inverse Operations | opposite operation ex: addition and subtraction, multiplication and division, square and square root, cube and cube root |
| No Solution or Undefined | An equation that is never true, no matter what value you place in for the variable. "No Solutions" |
| Solution | Any value or values that make an equation true. |
| Linear Inequality | Formed when the equality symbol of a linear equation is replaced by an inequality symbol (at most or less than and equal to, at least or greater than and equal to, fewer than or less than (<), more than or greater than ( >). |
| Distance Formula | The distance *d* between any two points is given by the formula d = |
| Hypotenuse | Longest side of a right triangle, opposite the right angle |
| Legs | The two sides of a right triangle that make up the right angle |
| Pythagorean Theorem | The Pythagorean Theorem describes the relationship of the lengths of the sides of a right triangle where in any right triangle, the sum of the squares of the lengths of the legs is equal to the square of the length of the hypotenuse. |
| Pythagorean Triple | Three positive integers that make up the lengths of the sides of a right triangle |
| Right Angle | Angle that measures 90 degrees |
| Area of a circle | Area of a circle is given by http://cmapp.wcpss.net/cgi-bin/mimetex.cgi?%5Cdisplaystyle%5CPitimes the square of the radius |
| Circumference | Circumference is the perimeter of or distance around a circle given by http://cmapp.wcpss.net/cgi-bin/mimetex.cgi?%5Cdisplaystyle%5CPitimes the diameter of the circle. |
| Cone | a solid, 3-dimensional figure with one vertex and one circular base. |
| Cylinder | A solid, 3-dimensional figure with a curved side and two circular, congruent bases that are in parallel planes |
| Sphere | A three dimensional solid that is perfectly round, ex. A ball. |
| Volume | The number of unit cubes or cubic units needed to fill the space inside a three-dimensional figure. |