

## Instructional Vocabulary

### Grade 6 Math

#### Unit 1: Numerical Understanding: Whole Numbers, Fractions, Decimals, and Integers

- **Equivalent** – having the same value
- **Integers** – the set of whole numbers and their opposites
- **Non-negative rational numbers** – the set of numbers that includes whole numbers, positive fractions, and positive decimals

#### Unit 2: Numerical Understanding and Operations: Factors, Multiples, and Operations with Whole Numbers

- **Greatest common factor** – the largest factor that two or more numbers have in common
- **Least common multiple** – the smallest multiple that two or more numbers have in common
- **Order of operations** – the rules of which calculation comes first when simplifying an expression
- **Prime factorization** – the process of decomposing a composite number as a unique product of prime factors

#### Unit 3: Numerical Operations: Addition and Subtraction of Fractions and Decimals

- **Common denominator** – a common multiple of the denominators of two or more fractions
- **Least common denominator** – the least common multiple of the denominators of two or more fractions

#### Unit 4: Proportionality: Representations and Applications

- **Percent** – a part of a whole expressed in hundredths
- **Proportion** – two equivalent ratios
- **Rate** – a ratio that compares two units of measure of different types
- **Ratio** – a comparison of two quantities

#### Unit 5: Algebraic Representations and Applications

- **Arithmetic sequence** – a sequence of numbers that have a constant rate of change
- **Coordinate system** – a two-dimensional system with a horizontal and vertical axis that intersect at the origin and lie in a plane creating four Quadrants (I, II, III, IV) where an ordered pair  $(x, y)$  or (horizontal, vertical) is used to describe the location of a specific point on the plane
- **Equation** – a mathematical sentence composed of algebraic expressions joined by an equal sign
- **Expression** – a mathematical representation consisting of symbols, operators, and/or variables to indicate operations to be performed on a group of numbers according to the order of operations
- **Representations** – concrete models, tables, graphs, verbal descriptions, and algebraic generalizations of data
- **Variable** – a symbol, usually a letter, used to represent an unknown value

#### Unit 6: Geometry: Angles, Triangles, and Quadrilaterals

- **Angle** – two rays that share a common endpoint

#### Unit 7: Measurement: Two-dimensional

- **Circumference** – the distance around a circle
- **Diameter** – a line segment whose endpoints are on the circle and passes through the center of the circle
- **Pi** – the ratio of the circumference to the diameter of a circle
- **Radius** – a line segment with one endpoint on the circle and the other endpoint at the center of the circle, which is half the length of the diameter
- **Standard unit** – a unit of measure that has been defined by a recognized authority, such as a government or standards organization. For example, *inches, meters, seconds, liters, pounds, and grams* are all standard units

#### Unit 8: Measurement: Capacity, Weight, Time, Temperature, and Volume

- **Elapsed time** – the amount of time between a start time and an end time
- **Capacity** – a measurement of the maximum amount a container will hold
- **Volume** – a measurement of the amount of space occupied by a three-dimensional figure, recorded in cubic units
- **Weight** – measure of the pull of gravity on an object

#### Unit 9: Statistical Representations and Analysis

- **Measures of central tendency** – statistical representations (mean, median, and mode) used to analyze data in a set
- **Mean** – the average of a set of data determined by balancing the set of data with concrete or pictorial models
- **Median** – the middle number of a set of data that has been arranged in order from greatest to least or least to greatest
- **Mode** – most frequent piece of data in set of data
- **Range** – the difference between the greatest number and least number in a set of data

#### Unit 10: Probability

- **Complement of an event** – the probability of the non-occurrence of a desired outcome
- **Composite event** – an event that consists of two or more simple events whose sample space can be displayed in an organized list, tree diagram, etc.
- **Probability** – a ratio between the number of desired outcomes to the total possible outcomes,  $0 \leq p \leq 1$
- **Sample space** – the set of all possible outcomes of an experiment
- **Simple event** – an event that consists of a single outcome

#### Unit 11: Making Connections

- **Equation** – a mathematical sentence composed of algebraic expressions joined by an equal sign
- **Expression** – a mathematical representation consisting of symbols, operators, and/or variables to indicate operations to be performed on a group of numbers according to the order of operations
- **Proportion** – two equivalent ratios

- **Ratio** – a comparison of two quantities
- **Representations** – concrete models, tables, graphs, verbal descriptions, and algebraic generalizations of data
- **Variable** – a symbol, usually a letter, used to represent an unknown value

#### Unit 12: Trip Investigation

- **Proportion** – two equivalent ratios
- **Rate** – a ratio that compares two units of measure of different types
- **Ratio** – a comparison of two quantities