Instructional Vocabulary

Grade 3 Math

Unit 1: Place Value

- **Digit** – any numeral from 0 – 9
- **Period** – a three-digit grouping of whole numbers separated by commas, where each grouping consists of units, tens, and hundreds
- **Place value** – the value of a digit as determined by its location in a number, such as units, tens, hundreds, etc.

Unit 2: Addition and Subtraction Foundations

- **Compatible numbers** – numbers that are easy to compute mentally
- **Estimate** – an answer close to, or to approximate an exact answer
- **Rounding** – a type of estimation with specific rules

Unit 3: Addition and Subtraction Operations

- **Bar graph** – a graph with horizontal or vertical bars that represents categorical data
- **Interval** – the set of all numbers between two given numbers
- **Perimeter** – the distance around the outer edge of a figure
- **Scale** – an arrangement of numbers at regular intervals

Unit 4: Multiplication and Division Foundations

- **Area model** – a rectangular grid formed from square units
- **Array** – a set of items arranged in rows and columns
- **Division** – one of the four basic operations of arithmetic where in the division statement $a \div b = c$, a is the dividend, b the divisor, and c is the quotient; the process of repeated subtraction
- **Factor** – a number multiplied by another number to find a product
- **Multiplication** – one of the four basic operations of arithmetic where in the multiplication statement $a \times b = c$, a is the multiplicand, b is the multiplier, and c is the product; the process of repeated addition
- **Product** – the solution to a multiplication problem
- **Quotient** – the solution to a division problem

Unit 5: All Operations

- **Multi-step problem** – a problem that requires two or more steps and/or operations to solve
- **Problem-solving model** – a flexible framework to think about the processes involved in mathematics (e.g., Poyla's stages: understanding the problem, making a plan, carrying out the plan, and looking back, etc.)
- **Problem-solving strategy** – a plan or strategy to solve word problems (e.g., acting it out, drawing a picture or graph, using logical reasoning, looking for a pattern, using a process of elimination, creating an organized chart or list, solving a simpler but related problem, using trial and error (systematic guessing and checking), working backwards, etc.)

Unit 6: Fractions

- **Fraction** – a number in the form $\frac{a}{b}$ or a/b where *a* and *b* are whole numbers and *b* is not equal to zero. A fraction can be used to name part of an object, part of a set of objects, or to represent division
- **Equivalent fractions** – fractions that have the same value

Unit 7: Measurement

- **Area** – the number of square units that cover a figure
- **Customary measurement** – the system of measurement used in the United States; usually written with fractions
- **Degrees Fahrenheit** – is the customary unit of measure for temperature
- **Metric measurement** – the system of international measure (SI) based on the decimal systems and base units of tens
- **Perimeter** – the distance around the outer edge of a figure
- **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 of measure

Unit 8: Geometry

- **Attribute** – a characteristic that helps define a figure
- **Congruent** – two figures that are exactly the same size and same shape
- **Line of symmetry** – an imaginary line on a two-dimensional figure that when folded produces two halves that match identically
- **One-dimensional figure** – a figure, such as a line or the side of a two-dimensional figure, that has one basic unit of measurement – length
- **Three-dimensional figure** – a figure that has three basic units of measurement (usually length, width, and height/depth)
- **Two-dimensional figure** – a figure that has two basic units of measurement (usually length and width)

Unit 9: Probability and Statistics

- **Bar graph** – a graph with horizontal or vertical bars that represents categorical data
- **Data** – numbers or information that is collected from a survey or experiment
- **Pictograph** – a graph composed of pictures where each picture may represent one or more than one unit of data
- **Probability** – the likelihood of an event occurring

Unit 10: Tying it all Up

- **Multi-step problem** – a problem that requires two or more steps and/or operations to solve
- **Problem-solving model** – a flexible framework to think about the processes involved in mathematics (e.g., Poyla's stages: understanding the problem, making a plan, carrying out the plan, and looking back, etc.)
- **Problem-solving strategy** – a plan or strategy to solve word problems (e.g., acting it out, drawing a picture or graph, using logical reasoning, looking for a pattern, using a process of elimination, creating an organized

chart or list, solving a simpler but related problem, using trial and error (systematic guessing and checking), working backwards, etc.)

Unit 11: Measurement Connections

- **Capacity** – a measurement of the maximum amount a container will hold
- **Customary measurement** – the system of measurement used in the United States usually written with fractions
- **Mass** – a measurement of the amount of matter in an object
- **Metric measurement** – the system of international measure (SI) based on the decimal systems and base units of tens
- **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 of measure.
- **Volume** – a measurement of the amount of space occupied by a three-dimensional figure; recorded in cubic units
- **Weight** – a measurement of the pull of gravity on an object

Unit 12: Fraction Connections

- **Equivalent Fractions** – fractions that have the same value
- **Fraction** – a number in the form   or a/b, where *a* and *b* are whole numbers, and *b* is not equal to zero. A fraction can be used to name part of an object, part of a set of objects, or to represent division