# **Instructional Vocabulary**

# Grade 2 Math

Unit 1: Number Relationships

- Fact families a set of related addition and subtraction facts
- Recall of facts one can give a quick response without resorting to a non-efficient method, such as counting fingers

# Unit 2: Quick Retrieval Using Problem Situations

• **Context** – the story scenario that provides clarity to the model, process, and/or operation needed to solve the situation

Unit 3: Numeration

- **10-long** a base-ten block that represents a value of 10
- **100-flat** a base-ten block that represents a value of 100 units or ten 10-longs
- **Comparative statement** a statement that describes whether numbers are equal to, less than, or greater than each other
- **Digit** any numeral from 0 9
- Equal to a symbol (=) used to compare two numbers, with the same value
- **Expanded notation** the representation of a number using place value (e.g., 789 is 7 groups of 100, 8 groups of 10, and 9 ones or 700 + 80 + 9)
- Greater than a symbol (>) used to compare two numbers, with the number of greater value given first
- Less than a symbol (
- **Place value** the value of a digit as determined by its location in a number
- Quantity the number or amount represented in a set
- Standard form a way of writing numbers using digits (e.g., 789)
- Unit a base-ten block that represents 1
- Unitize the foundation of our base-ten system which involves counting and grouping of 1s to 10s and 10s to 100s

### Unit 4: Number Lines

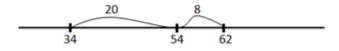
- **Degrees Fahrenheit** is the customary unit of measure for temperature
- Intervals incremental markings on a number line that may or may include points
- Number line a line on which points are indicated by tick marks and represent a specific value
- **Point** a specific location on a number line representing a value

### Unit 5: Data Representations

- **Bar-type graph** a graph where each bar is divided into individual cells to demonstrate one-to-one correspondence for each piece of data
- Picture graph a graph composed of pictures where each picture represents one unit of data

# Unit 6: Multi-Digit Addition and Subtraction - Concrete

- Composing numbers using number sense to combine numbers together for easy computations
- Decomposing numbers using number sense to break numbers apart for easy computations
- **Direct modeling** the use of objects, manipulatives, and/or illustrations to represent directly the solving process of a problem
- Open number line a number line representation that may or may not use equivalent intervals to demonstrate a solution process for an equation or mathematical problem (e.g., for the number sentence 34 + 28, an open number line could represent a solution strategy of decomposing the second number into tens and one, then adding the tens onto the first number, and then add the ones. See example below).

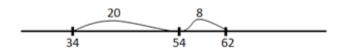


# Unit 7: Collection of Coins

• Cent "¢" - a symbol used to identify that the total is less than a dollar and represented in coins

# Unit 8: Multi-Digit Addition and Subtraction - Flexible Methods

- Aggregation the process of adding the ones units from one addend to the other addend, and then to that sum, add the remaining multiple of tens to that total (e.g., 37 + 34, in this case, the 4 ones from 34 can be added to 37, 37 + 4 = 41, and then to that total add the remaining multiple of tens, so, 41 + 30 = 71)
- Compensation the process of adding a specific amount to one addend in order to make that addend a multiple of ten and subtracting that same specific amount from the total (e.g., 37 + 34, 3 can be added to 37 to make 40, 40 + 34 = 74, and then 3 is subtracted to compensate for the 3 added, so, 74 3 = 71)
- Leveling the process of adding a specific amount to one addend in order to make that addend a multiple of ten and subtracting that same specific amount from the other addend to find the total (e.g., 37 + 34, make one addend a multiple of ten, so in this case, 3 is added to 37 and then you level the other addend by subtracting 3 from 34, so, 40 + 31 = 71)
- Open number line a number line representation that may or may not use equivalent intervals to demonstrate a solution process for an equation or mathematical problem (e.g., for the number sentence 34 + 28, an open number line could represent a solution strategy of decomposing the second number into tens and one, then adding the tens onto the first number, and then add the ones. See example below)



• **Partial sums** – addends that are separated into parts (tens and ones). Each part is combined separately, and then the sums of the parts are combined for the total sum (e.g., 46 + 25 is divided into 40 + 20 and 6 + 5, then their combined sums of 60 and 11 are combined for a total sum of 71)

# Unit 9: Geometry

• Attribute – describes how one or more things are alike or different

- **Curved surface** a surface with no edges
- Edge the line segment where two faces meet on a three-dimensional figure
- Face a flat surface in the shape of a two-dimensional figure
- **Polygon** a flat, closed figure that has three or more straight sides
- Side a line segment of a two-dimensional figure
- Three-dimensional figure a solid figure
- **Two-dimensional figure** a flat figure
- Vertex (vertices) a point or corner where two sides meet

### Unit 10: Multi-Digit Addition and Subtraction – Standard Methods

Open number line – a number line representation that may or may not use equivalent intervals to demonstrate a solution process for an equation or mathematical problem (e.g., For the number sentence 34 + 28, an open number line could represent a solution strategy of decomposing the second number into tens and one, then adding the tens onto the first number, and then add the ones).

# Unit 11: Multiplication and Division Situations

• None Identified

# Unit 12: Patterns and Relationships

- Additive pattern a pattern that has a rule that allows the pattern to change in a predictable manner (e.g., AB, ABC, ABCD [adds the next letter in the alphabet]; 2,4,6,8 [adds 2 to each value])
- **Repeating pattern** a pattern where the core repeats (e.g., AB, AB, AB, etc.)

### Unit 13: Fractions and Probability

- Certain event an event that will always happen
- Equally likely the same chance of happening
- Fractional parts of a set a part of a group or set of objects
- Fractional parts of a whole fair shares or equal parts of a whole
- Impossible event an event that will never happen
- Less likely not expected to happen or a small chance to be true
- More likely expected to happen or believed to be true

### Unit 14: Measurement: Linear

- **Certain event** an event that will always happen
- Impossible event an event that will never happen
- Fractional parts of a set a part of a group or set of objects
- Fractional parts of a whole fair shares or equal parts of a whole

# Unit 15: Multi-Digit Addition and Subtraction Operations

None identified

Unit 16: Applying fractions, coins, time and temperature to real-life situations

• None identified

Unit 17: Measurement, Area, Capacity, and Weight/Mass

- Area the amount of surface that is contained within a boundary
- Capacity the maximum amount a container will hold
- Estimate to make a well-informed guess
- **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 of Measure the object or unit used to measure an attribute (e.g., 14 color tiles, 14 cm cubes)