## OPERATIONS AND ALGEBRAIC THINKING – Represent and solve problems involving addition and subtraction

2.OA.1 Use addition and subtraction within with-in 100.

EE2.OA.1. Add and subtract to solve world one-step story problems from 0-20 when the result is unknown.

4 Add and subtract to solve real world one step story problems from 0-20 when any number in the problem is unknown.

3 Add and subtract to solve real world one step story problems when the result is unknown.

2 Given the equation, add to solve real world one-step story problems from 0-10

1 Identify the objects that appear in the real world one-step story problem.

## OPERATIONS AND ALGEBRAIC THINKING – Work with equal groups of objects to gain foundations for multiplication

2.0A.3. Work with groups of objects to gain foundations for multiplication

EE2.0A.3. Equally distribute even numbers of objects between two groups.

4 Determine that a quantity is even or odd by separating them into two groups

3 Equally distribute even numbers of objects between two groups

2 Separate objects into two groups and indicate how many in each group

1 Make two groups of two.

2.0A.3. Work with groups of objects to gain foundations for multiplication.

EE2.0A.3. Equally distribute even numbers of objects between two groups.

4 Determine that a quantity is even or odd by separating them into two groups

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2.0A.4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

**EE2.0A.4**. Use addition to find the total number of objects arranged within equal groups up to a total of 10.

4 Use addition to find the total number of objects arranged within equal groups beyond 10.

3 Use addition to find the total number of objects arranged within equal groups up to a total of 10.

2 Recognize that two groups are made up of quantities up to a total of less than 10.

1 Differentiate same/different when presented with two objects.

## NUMBERS AND OPERSATIONS BASE TEN - Understand place value

2.NBT.1

EE2.NBT.1. Represent numbers through 30 with sets of tens and ones with objects in columns or arrays.

4 Put numbers through 30 into sets of tens and ones with numbers

3 Represent numbers through 30 with sets of tens and ones with objects or columns in arrays.

2 Indicate that 10 ones equals 10 and zero ones

1 Demonstrate one to one correspondence.

EE2.NBT.2. Count from 1 to 30 (count with meaning; cardinality)

4	Demonstrate 1:1 correspondence.
C	Create sets

- 3 Create sets
- 2 Create one set of 10 to match to another set of ten.

1 Identify a set of 5

#### 2.NBT.3. Read and write numbers to 1000 using base-ten numerals, names and expanded form.

**EE2.NBT.3.** Identify number symbols 1 to 30.

4 Express number symbols beyond 30.

3 Identify number symbols 1 to 30.

2 Identify number symbols 1-10.

1 Differentiate between numbers and letters.

2.NBT.4. Compare two, three-digit numbers based on the meanings of the hundreds, tens and ones digits using >, = and < symbols to record the results of comparisons.

- EE2.NBT.4. Compare sets of objects and numbers using appropriate vocabulary (more, less, equal)
- 4 Compare sets of objects and numbers using appropriate vocabulary as equal, more or less when two or fewer units apart.
- 3 Compare sets of objects and numbers using appropriate vocabulary (more, less, equal).
- 2 Determine equality of sets of objects using appropriate vocabulary (equal).
- 1 Match groups of objects.

## NUMBERS AND OPERSATIONS BASE TEN - Use place value understanding and properties of operations to add and subtract

2.NBT.5.a. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. **EE2.NBT.5.a** Identify the meaning of the "+" sign

4 Identify the meaning of the "+" sign (i.e., combine plus, add), and the "=" sign (equal)

3 Identify the meaning of the "+" sign. (i.e., combine plus, add), and the "=" sign (equal)

2 Recognize the "+" and "=" signs.

1 Match the "+" and "=" signs.

2. NBT.5.b. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

EE2.NBT.5.b. Using concrete examples compose and decompose numbers up to 10 in more than one way.

4 Using numbers or representations compose and decompose numbers up to 10 in more than one way.

3 Using concrete examples compose and decompose numbers up to 10 in more than one way.

2 Using concrete examples compose and decompose numbers up to five in at least one way.

1 Recognize that groups of objects can be put together or taken apart.

## NUMBERS AND OPERSATIONS BASE TEN - Use place value understanding and properties of operations to add and subtract

2.NBT.6. Add up to four two-digit numbers using strategies based on place value and properties of operations.

**EE2.NBT.6-7.** Use objects, representations, and numbers (0-20) to add and subtract.

- 4 Use objects, representations, and numbers beyond 20 to add and subtract.
- 3 Use objects, representations, and numbers (0-20) to add and subtract.
- 2 Use objects, representations, and numbers (0-10) to add.
- 1 Count objects 1-10.

2.NBT.7. Add up to four two-digit numbers using strategies based on place value and properties of operations.

EE2.NBT.6-7. Use objects, representations, and numbers (0-20) to add and subtract.

4 Use objects, representations, and numbers beyond 20 to add and subtract.

3 Use objects, representations, and numbers (0-20) to add and subtract.

2 Use objects, representations, and numbers (0-10) to add.

1 Count objects 1-10.

## MEASUREMENT AND DATA - Measure and estimate lengths in standard units

2.MD.1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

2.MD.2. Measure the length of an object twice, using length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

**EE2.MD.1** Measure the length of objects using non-standard units.

4 Measure the length of objects using standard tools, such as rulers, yardsticks, and meter sticks by repeating the use of the measurement tool/unit.

3 Measure the length of objects using non-standard units.

2 Begin to measure from an end point using a non-standard tool.

1 Match objects of like length.

2.MD.3. Estimate lengths using units of inches, feet, centimeters, and meters.

2.MD.4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

#### **EE2.MD.3-4** Order by length using non-standard units.

4 Use non-standard units to measure length of objects (i.e., paperclips, blocks).

3 Order by length using non-standard units.

2 Compare two non-standard units of length and determine which is shorter and which is longer.

1 Compare an item to a model that is shorter or longer.



#### MEASUREMENT AND DATA - Relate addition and subtraction to length

2.MD.5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.

EE2.MD.5 Increase or decrease length by adding or subtracting unit(s),

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4	Increase or decrease length by adding or subtracting multiple units.
3	Increase or decrease length by adding or subtracting unit(s).
2	Increase length by adding a single unit.
1	Compare two objects and determine which is longer.

2.MD.6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0,1,2,..., and represent whole-number sums and differences within 100 on a number line diagram.

## **2.EE2.MD.6** Use a number line to add one more unit of length.

4	Use a number line to add more than one unit of length.
3	Use a number line to add one more unit of length.
2	Count forward on a number line to 10 showing units of length.
1	Indicate one more number on a number line and track left to right.

#### MEASUREMENT AND DATA - Work with time and money

# 2.MD.7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

2.EE2.MD.7 Indicate the digit that tells the hour on a digital clock.

4	Tell time to the hour on a digital and analog clock.
3	Indicate the digital that tells the hour on a digital clock.
2	Indicate the relationship between a clock and their daily schedule.
1	Indicate that a clock is used to tell time.

2.MD.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and c symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?

## 2.EE2.MD.8 Recognize that money has value.

4	Recognize that money is used in exchange for goods.
3	Recognize that money has value.
2	Sort money from other objects.
1	Understand that goods (items) have value.



Grade 2 Mathematics Essential Elements "I Can" Statements

## **MEASUREMENT AND DATA - Represent and interpret data**

2.MD.9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

2.MD.10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.

2.EE2.MD.9-10 Create picture graphs from collected measurement data.

4 Organize, represent, and interpret length/height data using concrete objects to create picture graphs.

3 Create picture graphs from collected measurement data.

2 Create picture graphs from collected measurement data using model.

1 Contribute to data collection.

## **GEOMETRY** - Reason with shapes and their attributes

2.G-1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.7 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.

2.EE2.G-1. Describe attributes of two-dimensional shapes.

4	Describe mathematical attributes of two-and three-dimensional shapes.
3	Describe attributes of two-dimensional shapes.
2	Sort by one attribute (shape).
1	Explore shapes with different attributes.