#### 4<sup>th</sup> Grade Math Learning Targets

#### Algebra:

### **4.A.1.1. Students are able to simplify whole number expressions involving addition, subtraction, multiplication, and division. -** Comprehension

• I can say the order of operations. (4.A.1.1)

Order of operations = first do what is in parenthesis, then do multiplication and division from left to right, then do addition and subtraction from left to right

- I can explain how an equation and an expression are different.
- I can use the order of operations to simplify an expression without a variable. (4.A.1.1)
- I can identify a variable in an expression. (4.A.1.1)
- I can define what variable means. (4.A.1.1)
- I can use the order of operations to simplify an expression with a variable. (4.A.1.1)

## **4.A.1.2.** Students are able to recognize and use the commutative property of addition and multiplication. - Application

- I can define the commutative property. (4.A.1.2)
- I can use the commutative property in addition problems and get the same answer. (4.A.1.2)
- I can use the commutative property in multiplication problems and get the same answers. (4.A.1.2)

# **4.A.1.3.** Students are able to relate the concepts of addition, subtraction, multiplication, and division to one another. - Application

- I can solve a multiplication word problem with repeated addition. (4.A.1.3)
- I can solve a multiplication word problem with division. (4.A.1.3)
  - I can solve a multiplication word problem with repeated subtraction. Example:  $12 \times 5 = 60 - 12 - 12 - 12 - 12 - 12$
- I can solve a division word problem with repeated subtraction. (4.A.1.3)
- I can solve a division word problem with multiplication. (4.A.1.3)
  - I can solve a division word problem with repeated addition. Example: 60/12 = 12 + 12 + 12 + 12 + 12

## **4.A.2.1.** Students are able to select appropriate relational symbols (<, >, =) to make number sentences true. - Comprehension

• I can place the correct symbol >, <, or = in a number sentence to make it true. (4.A.2.1)

## **4.A.2.2. Students are able to simplify a two-step equation using whole numbers. - Application**

• I can find the value of a variable in an equation (with two steps). (4.A.2.2)

#### **4.A.3.1.** Students are able to write and solve number sentences that represent onestep word problems using whole numbers. - Application

- I can define a whole number. (4.A.3.1)
- I can write a number sentence to solve a word problem (whole numbers / one step). (4.A.3.1)
- I can solve a word problem using a number sentence I created (whole numbers / one step). (4.A.3.1)

# **4.A.4.1.** Students are able to solve problems involving pattern identification and completion of patterns. - Application

- I can describe a number pattern. (4.A.4.1)
- I can continue a number pattern. (4.A.4.1)
- I can describe a shape pattern. (4.A.4.1)
- I can continue a shape pattern. (4.A.4.1)

#### Geometry:

# **4.G.1.1.** Students are able to identify the following plane and solid figures: pentagon, hexagon, octagon, pyramid, rectangular prism, and cone. - Knowledge

- I can define a plane figure. (4.G.1.1)
- I can label a pentagon, a hexagon, and an octagon. (4.G.1.1)
- I can list the properties of a pentagon, a hexagon, and an octagon. (4.G.1.1)
- I can define a solid figure. (4.G.1.1)
- I can label a pyramid, a rectangular prism, and a cone. (4.G.1.1)
- I can list the properties of a pyramid, a rectangular prism, and a cone. (4.G.1.1)

# 4.G.1.2. Students are able to identify parallel, perpendicular, and intersecting lines. - Knowledge

- I can name a line using the correct symbol. (4.G.1.2)
- I can identify parallel lines. (4.G.1.2)
- I can identify perpendicular lines. (4.G.1.2)
- I can identify intersecting lines. (4.G.1.2)

## **4.G.2.1.** Students are able to compare geometric figures using size, shape, orientation, congruence, and similarity. - Comprehension

- I can describe how two shapes are alike. (4.G.2.1)
- I can describe how two shapes are different. (4.G.2.1)
- I can define congruent. (4.G.2.1)
- I can tell if two shapes are congruent. (4.G.2.1)
- I can define similar. (4.G.2.1)
- I can tell if two shapes are similar. (4.G.2.1)

# **4.G.2.2.** Students are able to identify a slide (translation) of a given figure. - Knowledge

- I can define slide. (4.G.2.2)
- I can recognize a figure that has been moved from one position to another as a slide (4.G.2.2)

#### Measurement:

#### Time:

#### **4.M.1.1. Students are able to identify equivalent periods of time and solve problems.** - Knowledge

- I can name periods of time that are equal. (4.M.1.1)
- I can solve problems using equal periods of time. (4.M.1.1)

#### Money:

## **4.M.1.2.** Students are able to solve problems involving money including unit conversion. - Application

- I can solve problems by adding money. (4.M.1.2)
- I can solve problems by subtracting money. (4.M.1.2)
- I can solve problems by multiplying money. (4.M.1.2)
- I can solve problems by dividing money. (4.M.1.2)
- I can change money from coins to bills and bills to coins. (4.M.1.2)
- I can make change. (4.M.1.2)

#### **US Customary:**

#### 4.M.1.3. Students are able to use scales of length, temperature, capacity, and weight. - Application

- I can list the tools that measure length. (4.M.1.3)
- I can use the best tool to measure length. (4.M.1.3)
- I can list the tool that measures temperature. (4.M.1.3)
- I can use a tool to measure temperature. (4.M.1.3)
- I can list the tools that measure capacity. (4.M.1.3)
- I can use the best tool to measure capacity. (4.M.1.3)
- I can list the tools that measure weight. (4.M.1.3)
- I can use the best tool to measure weight. (4.M.1.3)

## 4.M.1.4. Students are able to measure length to the nearest quarter inch. - Comprehension

• I can measure length to the nearest quarter-inch. (4.M.1.4)

#### Number Sense:

## **4.N.1.1.** Students are able to read, write, order, and compare numbers from .01 to 1,000,000. - Comprehension

- I can define whole number. (4.N.1.1)
- I can define decimal. (4.N.1.1)
- I can define standard form. (4.N.1.1)
- I can define expanded form. (4.N.1.1)
- I can define word form. (4.N.1.1)
- I can read numbers from .01 to 1,000,000. (4.N.1.1)
- I can write numbers from .01 to 1,000,000. (4.N.1.1)
- I can order numbers from .01 to 1,000,000. (4.N.1.1)
- I can compare numbers from .01 to 1,000,000. (4.N.1.1)

## **4.N.1.2.** Students are able to find multiples of whole numbers through 12. - Comprehension

- I can define what a multiple is. (4.N.1.2)
- I can find the multiples of numbers 11-12. (4.N.1.2)

# **4.N.1.3.** Students are able to use a number line to compare numerical value of fractions or mixed numbers (fourths, thirds, and halves). - Comprehension

- I can tell what a fraction is (fourths, thirds, and halves). (4.N.1.3)
  - I can tell what an improper fraction is.
  - I can tell what a proper fraction is.
- I can find a fraction on a number line (fourths, thirds, and halves). (4.N.1.3)
- I can use a number line to compare two fractions. (fourths, thirds, and halves). (4.N.1.3)
- I can tell what a mixed number is. (fourths, thirds, and halves). (4.N.1.3)
- I can find a mixed number on a number line (fourths, thirds, and halves). (4.N.1.3)
- I can use a number line to compare two mixed numbers. (fourths, thirds, and halves). (4.N.1.3)

#### 4.N.1.4 Students are able to interpret negative integers in temperature. - Application

- I can read a thermometer. (4.N.1.4)
- I can read a negative integer. (4.N.1.4)
- I can show a negative integer on a thermometer. (4.N.1.4)
- I can solve problems with changes in negative temperatures. (4.N.1.4)

## **4.N.2.1** Students are able to find the products of two-digit factors and quotient of two natural numbers using a one-digit divisor. - Application

- I can define factor. (4.N.2.1)
- I can define product. (4.N.2.1)
- I can define divisor. (4.N.2.1)
- I can define dividend. (4.N.2.1)
- I can define quotient. (4.N.2.1)
- I can multiply a two digit number by a two digit number.
- I can divide a number by a one digit divisor.

- I can show I know multiplication facts through the twelves.
- I can show I know division facts through the twelves.

## 4.N.2.2 Students are able to add and subtract decimals with the same number of decimal places. - Application

- I can add two decimals together (with the same number of decimal places). (4.N.2.2)
- I can subtract one decimal from another decimal (with the same number of decimal places. (4.N.2.2)

# **4.N.3.1** Students are able to estimate sums and differences in whole numbers and money to determine if a given answer is reasonable. - Application

- I can define estimate. (4.N.3.1)
- I can tell the difference between estimating and rounding. (4.N.3.1)
- I can estimate to solve addition problems. (4.N.3.1)
- I can estimate to solve subtraction problems. (4.N.3.1)

#### **Statistics and Probability:**

# **4.S.1.1** Students are able to interpret <u>data from graphical representations</u> and draw conclusions. - Application

- I can define data. (4.S.1.1)
- I can answer questions about line graphs. (4.S.1.1)
- I can answer questions about bar graphs. (4.S.1.1)
- I can answer questions about pictographs. (4.S.1.1)
- I can answer questions about line plots. (4.S.1.1)

## **4.S.1.2** Given a small ordered <u>data set of whole number</u> data points (<u>odd number of points</u>), students are able to identify the <u>median, mode, and range</u>. - Knowledge

- I can define median. (4.S.1.2)
- I can define mode. (4.S.1.2)
- I can define range. (4.S.1.2)
- I can find the median of a set of data. (4.S.1.2)
- I can find the mode of a set of data. (4.S.1.2)
- I can find the range of a set of data. (4.S.1.2)

### **4.S.2.1** Students are able to determine the <u>probability of simple events limited to</u> <u>equally likely and not equally likely outcomes.</u> - Comprehension

- I can tell if an event is more likely to happen. (4.S.2.1)
- I can tell if an event is less likely to happen. (4.S.2.1)
- I can tell if an event is equally likely to happen. (4.S.2.1)
- I can tell if an event is impossible. (4.S.2.1)
- I can tell if an event is certain. (4.S.2.1)

\*\*\* Where should place value go?

\*\*\* What about the base ten system?