

3rd Grade Math Learning Targets

Algebra:

Indicator 1: Use procedures to transform algebraic expressions.

3.A.1.1. Students are able to explain the relationship between repeated addition and multiplication. - Comprehension

- I can explain how repeated addition and multiplication are related. (3.A.1.1)
 - I can explain how repeated subtraction and division are related.
- I can show how to solve a problem with repeated addition. (3.A.1.1)
- I can show how to solve a problem with multiplication. (3.A.1.1)

3.A.1.2. Students are able to identify special properties of 0 and 1 with respect to arithmetic operations (addition, subtraction, multiplication). - Knowledge

- I can add zero to any number and still get the same number. (3.A.1.2)
- I can subtract zero from any number and get the same number. (3.A.1.2)
- I can add one to any number and get the next number. (3.A.1.2)
- I can subtract one from any number and get the previous number. (3.A.1.2)
- I can multiply a number by one and get the same number. (3.A.1.2)
- I can multiply a number by zero and get zero. (3.A.1.2)

Indicator 2: Use a variety of algebraic concepts and methods to solve equations and inequalities.

3.A.2.1. Students are able to select appropriate relational symbols ($<$, $>$, $=$) to compare numbers. - Comprehension

- I can choose and write the symbol greater than ($>$) when the first number is greater than the second number. (3.A.2.1) and (3.N.1.1)
- I can choose and write the symbol less than ($<$) when the first number is less than the second number. (3.A.2.1) and (3.N.1.1)
- I can choose and write the symbol equal to ($=$) to show when two numbers are equal to (are the same as) each other. (3.A.2.1) and (3.N.1.1)
 - I can use the equal symbol to make two sides of an equation the same. (e.g. $4 + 8 = 6 + \square$)

3.A.2.2. Students are able to solve problems involving addition and subtraction of whole numbers. - Application

- I can solve word problems using addition. (3.A.2.2)
- I can solve word problems using subtraction. (3.A.2.2)

Indicator 3: Interpret and develop mathematical models.

3.A.3.1. Students are able to use the relationship between multiplication and division to compute and check results. - Application

- I can explain how multiplication and division are related. (3.A.3.1)
- I can solve a multiplication problem by using a related division problem (3.A.3.1)
- I can prove my answer to a multiplication problem is correct by using division. (3.A.3.1)
- I can solve a division problem by using a related multiplication problem. (3.A.3.1)
- I can prove my answer to a division problem is correct by using multiplication. (3.A.3.1)

Indicator 4: Describe and use the properties and behaviors of relations, functions, and inverses.

3.A.4.1. Students are able to extend linear patterns. - Comprehension

- I can add on to a pattern of numbers that increases by a constant amount. (4.A.4.1)
(e.g. 4, 8, 12, 16, ____, ____)
 - I can add on to a pattern of numbers that increases by an increasing amount.
(e.g. 4, 8, 13, 19, 26, ____, ____)
- I can add on to a pattern of numbers that decreases by a constant amount. (4.A.4.1)
(e.g. 24, 20, 16, ____, ____)
 - I can add on to a pattern of numbers that decreases by an increasing amount.
(e.g. 43, 34, 26, 19, 13, ____, ____)

3.A.4.2. Students are able to use number patterns and relationships to learn basic facts. - Application

- I can learn multiplication facts to 10 using several strategies. (3.A.4.2)
 - Strategy: Commutative property (e.g. 2×8 is the same as 8×2)
 - Strategy: Rectangular array
 - Strategy: Skip counting
 - Strategy: Doubling
 - Strategy: Finger tricks
 - Strategy: Using known facts to determine unknown facts

Geometry:

Indicator 1: Use deductive and inductive reasoning to recognize and apply properties of geometric figures.

3.G.1.1. Students are able to recognize and compare the following plane and solid geometric figures: square, rectangle, triangle, cube, sphere, and cylinder. - Comprehension

- I can label a square, a rectangle, and a triangle. (3.G.1.1)
- I can tell how squares, rectangles, and triangles are similar. (3.G.1.1)
- I can tell how squares, rectangles, and triangles are different. (3.G.1.1)
 - I can list the properties of a square, a rectangle, and a triangle.
- I can label a cube, a sphere, and a cylinder. (3.G.1.1)
- I can tell how cubes, spheres, and cylinders are similar. (3.G.1.1)
- I can tell how cubes, spheres, and cylinders are different. (3.G.1.1)
 - I can list the properties of a cube, a sphere, and a cylinder.

3.G.1.2. Students are able to identify points, lines, line segments, and rays. - Knowledge

- I can draw a point. (3.G.1.2)
- I can draw a line. (3.G.1.2)
- I can draw a line segment. (3.G.1.2)
- I can draw a ray. (3.G.1.2)

Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.

3.G.2.1. Students are able to demonstrate relationships between figures using similarity and congruence. - Comprehension

- I can choose shapes that are similar (3.G.2.1)
- I can choose shapes that are congruent (3.G.2.1)

Measurement:

Indicator 1: Apply measurement concepts in practical applications.

Time: (time to 5 minute intervals):

3.M.1.1. Students are able to read and tell time before and after the hour within five-minute intervals on an analog clock. - Knowledge

- I can say the time before the hour on an analog clock. (3.M.1.1)
- I can say the time after the hour on an analog clock. (3.M.1.1)
- I can write the time before the hour on an analog clock. (3.M.1.1)
- I can write the time after the hour on an analog clock. (3.M.1.1)

Money:

3.M.1.2. Students are able to count, compare, and solve problems using a collection of coins and bills. - Application

- I can count a collection of coins and bills. (3.M.1.2)
- I can compare two sets of coins and bills by saying which has a greater value. (3.M.1.2)
- I can solve word problems using a collection of coins and bills. (3.M.1.2)

US Customary:

3.M.1.3. Students are able to identify U.S. Customary units of length (feet), weight (pounds), and capacity (gallons). - Knowledge

- I can use miles, yards, feet, and inches for measuring length. (3.M.1.3)
- I can use tons, pounds, and ounces for measuring weight. (3.M.1.3)
- I can use gallons, quarts, pints, and cups for measuring capacity. (3.M.1.3)

3.M.1.4. Students are able to select appropriate units to measure length (inch, foot, mile, yard); weight (ounces, pounds, tons); and capacity (cups, pints, quarts, gallons). - Application

- I can select the correct label when measuring length. (3.M.1.4)
- I can select the correct label when measuring weight. (3.M.1.4)
- I can select the correct label when measuring capacity. (3.M.1.4)

3.M.1.5. Students are able to measure length to the nearest $\frac{1}{2}$ inch. - Knowledge

- I can measure length to the nearest $\frac{1}{2}$ inch. (3.M.1.5)

Number Sense:

Indicator 1: Analyze the structural characteristics of the real number system and its various subsystems. Analyze the concept of value, magnitude, and relative magnitude of real numbers.

3.N.1.1. Students are able to place in order and compare whole numbers less than 10,000, using appropriate words and symbols. - Comprehension

- I can put numbers in order. (3.N.1.1) –(up to hundred thousand)
- I can use words to compare numbers. (3.N.1.1)
- I can use symbols $>$, $<$, $=$ to compare numbers. (3.N.1.1)

3.N.1.2. Students are able to find multiples of whole numbers 2, 5, and 10. - Comprehension

- I can find, say or write the multiples of 2. (3.N.1.2)
- I can find, say or write the multiples of 5. (3.N.1.2)
- I can find, say or write the multiples of 10. (3.N.1.2)

3.N.1.3. Students are able to name and write fractions from visual representations. - Knowledge

- I can look at a picture showing parts of a whole and name the fraction. (3.N.1.3)
- I can look at a picture showing parts of a group and name the fraction. (3.N.1.3)
- I can look at a picture showing parts of a whole and write the fraction. (3.N.1.3)
- I can look at a picture showing parts of a group and write the fraction. (3.N.1.3)

Indicator 2: Apply operations within the set of real numbers.

3.N.2.1. Students are able to add and subtract whole numbers up to three digits and multiply two digits by one digit. - Application

- I can recall multiplication facts through ten. (3.N.2.1)
 - I can recall division facts through ten.
- I can add three-digit numbers. (3.N.2.1)
- I can subtract three-digit numbers. (3.N.2.1)
- I can multiply a two-digit number by a one-digit number. (3.N.2.1)

Indicator 3: Develop conjectures, predictions, or estimations in the process of problem solving and verify or justify the results.

3.N.3.1. Students are able to round two-digit whole numbers to the nearest tens, and three-digit whole numbers to the nearest hundreds. - Application

- I can round two-digit numbers to the nearest ten. (3.N.3.1)
- I can round three-digit numbers to the nearest hundred. (3.N.3.1)
 - I can round three-digit numbers to the nearest ten.

Statistics and Probability:

Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.

3.S.1.1. Students are able to ask and answer questions from data represented in bar graphs, pictographs and tally charts. - Application

- I can ask questions from information in bar graphs. (3.S.1.1)
- I can answer questions from information in bar graphs. (3.S.1.1)
- I can ask questions from information in pictographs. (3.S.1.1)
- I can answer questions from information in pictographs. (3.S.1.1)
- I can ask questions from information in tally charts. (3.S.1.1)
- I can answer questions from information in tally charts. (3.S.1.1)

3.S.1.2. Students are able to gather data and use the information to complete a scaled and labeled graph. - Application

- I can collect data. (3.S.1.2)
- I can create a bar graph from gathered data. (3.S.1.2)
- I can create a pictograph from gathered data. (3.S.1.2)
- I can create a tally chart from gathered data. (3.S.1.2)
- I can label the horizontal and vertical scales of a bar graph. (3.S.1.2)

- I can create a key for a pictograph. (3.S.1.2)

Indicator 2: Apply the concepts of probability to predict outcomes and solve problems.

3.S.2.1. Students are able to describe events as certain or impossible. - Comprehension

- I can tell the likelihood of an event is certain or impossible. (3.S.2.1)