## Correlation

The following is a correlation of Investigations 3 to the Common Core State Standards for Mathematics. Assessment Benchmarks are included with their associated standards.

## Common Core State Standards for Mathematics Grade 2

## Grade 2 <br> Investigations 3

## Operations and Algebraic Thinking 2.OA

Represent and solve problems involving addition and subtraction.
2.OA.A. 1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Unit 1 2.3, 2.4, 3.1, 3.3, 3.4, 3.6, 3.7, Investigation 4 Benchmark 3: Solve a comparison story problem with the difference unknown. Benchmark 4: Solve put together/take apart story problems with the total unknown, and add to and take from story problems with the result unknown.
Unit 2 CR 1.4, CR 3.3
Unit 3 1.2, 1.3, CR 1.4, 1.5, 1.6, 1.7, 1.8, 2.3, 2.4, 2.6, 2.7, 2.8, 2.9, Investigation 3 Benchmark 1: Solve a put together/take apart story problem with both addends unknown, and find all the possible combinations.
Benchmark 2: Solve a put together/take apart story problem with one addend unknown.
Benchmark 3: Solve two-step story problems about money.
Benchmark 6: Solve story problems with an unknown change.
Benchmark 7: Solve story problems with an unknown start.
Unit 4 CR 1.2, 1.4, 1.5, 1.6, CR 2.1, 2.2, CR 2.6
Unit 5 1.3, 1.5, 1.6, Investigation 3
Benchmark 1: Solve a 2-step story problem
that involves finding the difference between a 2-digit number and 100. Benchmark 7: Solve comparison story problems with a bigger unknown.
Unit 6 1.2, 1.3, 1.5, 1.6, 2.1, 2.2, CR 2.3, 2.4, 2.5, 2.6
Unit 7 CR 2.3
Unit 8 1.1, 1.2, 1.3, $C R 1.5,1.6,1.7,1.8,1.9,1.10$, 1.11, CR 2.1, CR 2.3, CR 2.5, CR 2.6, CR 2.7 Benchmark 1: Solve a comparison story problem with a smaller unknown.
Benchmark 4: Fluently subtract 2-digit numbers.

## Common Core State Standards for Mathematics Grade 2 <br> Grade 2 <br> Investigations 3

Add and subtract within 20.
2.0A.B. 2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. (See standard 1.OA. 6 for a list of mental strategies.)

Unit 1 1.1, $C R 1.2,1.3, C R 1.4, C R 1.5, C R 1.6$, Investigation 2, 3.2, 3.3, 3.4, 3.6, 3.7, CR 4.2, CR 4.4, CR 4.5

Benchmark 2: Use known combinations to add several numbers in any order.
Unit 2 CR 1.1, CR 2.1, 2.3, 2.4, CR 2.5, CR 3.1
Unit 3 CR 1.1, $C R 1.3,1.4,1.6,1.7,1.8,2.1,2.2$, CR 2.3, 2.6, 2.7, 2.8, CR 3.2, 3.3, 3.5, 3.6
Unit 4 CR 1.1, $C R 1.2,1.4,1.5,1.6, C R 2.1,2.2$, CR 2.4, CR 2.5, CR 2.6
Unit 5 1.1, 1.3, 1.5, 1.6, 2.1, CR 2.3, 3.3, CR 3.7
Unit 6 CR 1.6, CR 2.3, CR 2.6
Unit 7 CR 1.3, 2.1, CR 2.3, 2.5, 2.6
Unit 8 1.2, 1.3, $C R 1.5,1.9,1.11, C R 2.1, C R 2.3$, 2.5, CR 2.7, 2.8

Benchmark 4: Fluently add and subtract within 20.

## Work with equal groups of objects to gain foundations for multiplication.

2.OA.C. 3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2 s ; write an equation to express an even number as a sum of two equal addends.

Unit 7 Investigation 1
Benchmark 1: Define even and odd numbers in terms of numbers that can/ cannot be organized into groups of two or two equal groups.
Benchmark 2: Write and equation to express an even number as a sum of two equal addends.
Benchmark 3: Solve problems that involve equal groups.

Unit 7 Investigation 2
Benchmark 4: Write an addition equation to express the total number of objects in a rectangular array.

## Common Core State Standards for Mathematics Grade 2

## Number and Operations in Base Ten 2.NBT

## Understand place value.

2.NBT.A. 1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
2.NBT.A.1a 100 can be thought of as a bundle of ten tens-called a "hundred."

Unit 3 CR 3.3, CR 3.5, CR 3.6
Benchmark 4: Understand that 100 can be seen one hundred, as ten tens, and as 100 ones.
Benchmark 5: Understand that multiples of 100 (e.g., 200, 300, 400, etc.) are made up of a number ( $2,3,4$, etc.) of hundreds
Unit 5 2.3, 2.4, 2.5, 2.6, CR 3.2, 3.6, 3.7
Benchmark 2: Understand that 3-digit numbers represent amounts of hundreds, tens, and ones.
Unit 6 CR 1.1, CR 1.2, CR 1.4, CR 1.5, CR 2.2
Unit 7 CR 1.1, CR 1.4, CR 2.1
Unit 8 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, CR 2.9 Benchmark 5: Represent and solve addition and subtraction problems with 3-digit numbers.

Unit 3 1.4, 1.5, 1.6, 1.7, 1.8, 3.2, 3.3, 3.5, 3.6 Benchmark 4: Understand that 100 can be seen one hundred, as ten tens, and as 100 ones.
Unit 5 CR 2.4, 2.6, CR 3.2
Benchmark 2: Understand that 3-digit numbers represent amounts of hundreds, tens, and ones.

Unit 3 3.2, 3.3, 3.5, 3.6
Benchmark 5: Understand that multiples of 100 (e.g., 200, 300, 400, etc.) are made up of a number ( $2,3,4$, etc.) of hundreds.
Unit 5 CR 2.2, 2.3, 2.4, 2.6, 3.6
Benchmark 2: Understand that 3-digit numbers represent amounts of hundreds, tens, and ones.
Benchmark 5: Represent and solve addition and subtraction problems with 3-digit numbers.

## Common Core State Standards for Mathematics Grade 2

2.NBT.A. 2 Count within 1000; skip-count by 5s, 10s, and 100s.

## Grade 2

Investigations 3
Unit 1 1.2, 1.3, 1.4, 1.5, 1.6, 2.4, 3.1, 3.3, 3.4, 3.5, 3.6, CR 3.7

Unit 3 CR 2.4, CR 3.4, CR 3.6, CR 3.7
Unit 4 CR 1.5, CR 2.2
Unit 5 2.2, 2.6, CR 3.2, 3.3, CR 3.4, 3.5, 3.6, 3.7, 3.8 Benchmark 3: Read, write, count and compare numbers to 1,000 .
Benchmark 7: Count by 5s, 10s, and 100s within 1,000.
Unit 7 1.1, 1.2, 2.1, 2.2, 2.3, 2.4
2.NBT.A. 3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
2.NBT.A. 4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Unit 1 1.4, 1.5, 1.6, 2.6, 3.2
Unit 3 1.5, 1.6, 1.7, 1.8, 3.3, 3.5
Unit 5 CR 1.2, 2.2, 2.3, 2.4, 2.5, 2.6, CR 3.2, 3.5, 3.6, 3.7

Benchmark 3: Read, write, count and compare numbers to 1,000 .
Unit 6 CR 1.1, CR 1.2, CR 1.4, CR 1.5, CR 2.2
Unit 7 CR 1.1, CR 1.4, CR 2.1
Unit 8 2.1, 2.2, 2.3, 2.4, 2.5, CR 2.9
Unit 3 3.3, 3.5
Unit 5 CR 1.5, CR 1.6, 2.2, 2.3, 2.4, 2.5, CR 2.6, CR 3.5, CR 3.8
Benchmark 2: Understand that 3-digit numbers represent amounts of hundreds, tens, and ones.
Benchmark 3: Read, write, count and compare numbers to 1,000 .
Unit 6 CR 1.1, CR 1.4
Unit 7 CR 1.1, CR 1.4, CR 2.1
Unit 82.1

## Common Core State Standards for Mathematics Grade 2

Grade 2
Investigations 3

## Use place value understanding and properties of operations to add and subtract.

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

Unit 1 CR 2.4, 3.6
Unit 2 CR 3.4
Unit 3 1.4, 1.5, 1.6, 1.7, 1.8, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, Investigation 3

Benchmark 1: Solve a put together/take apart story problem with both addends unknown, and find all the possible combinations.
Benchmark 2: Solve a put together/take apart story problem with one addend unknown.
Benchmark 3: Solve two-step story problems about money
Benchmark 6: Solve story problems with an unknown change.
Benchmark 7: Solve story problems with an unknown start.
Unit 4 CR 1.1, CR 2.5
Unit 5 Investigation 1, Investigation 2, Investigation 3
Benchmark 1: Solve a 2-step story problem that involves finding the difference between a 2-digit number and 100. Benchmark 5: Add fluently within 100. Benchmark 6: Solve comparison story problems with a bigger unknown.
Unit 6 CR 1.1, 1.2, 1.3, CR 1.4, 1.5, 1.6, 2.1, 2.2, CR 2.3, 2.4, 2.5, 2.6
Unit 7 CR 1.1, CR 1.4, Investigation 2
Unit 8 Investigation 1
Benchmark 1: Solve a comparison story problem with a smaller unknown. Benchmark 3: Fluently subtract 2-digit numbers.

Unit 13.4
Unit 3 CR 1.5, 2.5, 2.6, 2.7, 2.8, 2.9, 3.6
Benchmark 3: Solve two-step story problems about money.
Unit 4 CR 1.1, CR 2.5
Unit 5 1.2, 1.3, $C R 2.3,3.1,3.2,3.3, C R 3.7$
Benchmark 5: Add fluently within 100.
Unit 6 CR 2.4
Unit 8 CR 1.7, CR 2.6, CR 2.9

## Common Core State Standards for Mathematics Grade 2

2.NBT.B. 7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
2.NBT.B. 8 Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.
2.NBT.B. 9 Explain why addition and subtraction strategies work, using place value and the properties of operations. (Explanations may be supported by drawings or objects.)

Grade 2 Investigations 3

## Unit 8 Investigation 2

 Benchmark 5: Represent and solve addition and subtraction problems with 3-digit numbers.
## Unit 33.6

Unit 5 1.6, 2.3, 2.4, 2.5, 2.6, 3.3, 3.5, 3.6, 3.7
Benchmark 4: Add/subtract 10 or 100 to/ from numbers within 1,000.

Unit 1 2.2, 2.3, 2.5, 2.6, 2.8, 3.1, 3.2, 3.6, 3.7, Investigation 4
Benchmark 2: Use known combinations to add several numbers in any order. Benchmark 3: Solve a comparison story problem with the difference unknown. Benchmark 4: Solve put together/take apart story problems with the total unknown, and add to and take from story problems with the result unknown.
Unit 3 1.4, 1.5, 1.6, 1.7, 1.8, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 3.4, 3.7

Benchmark 1: Solve a put together/take apart story problem with both addends unknown, and find all the possible combinations.
Benchmark 2: Solve a put together/take apart story problem with one addend unknown.
Benchmark 3: Solve two-step story problems about money.
Benchmark 6: Solve story problems with an unknown change.
Benchmark 7: Solve story problems with an unknown start.
Unit 5 1.3, CR 1.4, 1.5, CR 1.6, 2.2, 2.4, 3.1, 3.2, 3.4, 3.5, 3.6, 3.7, CR 3.8

Benchmark 1: Solve a 2-step story problem that involves finding the difference between a 2-digit number and 100. Benchmark 6: Solve comparison story problems with a bigger unknown.

Common Core State Standards for Mathematics Grade 2

Grade 2 Investigations 3
Unit 8 1.1, 1.2, 1.3, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, Investigation 2
Benchmark 1: Solve a comparison story problem with a smaller unknown.
Benchmark 3: Fluently subtract 2-digit numbers.
Benchmark 4: Represent and solve addition and subtraction problems with 3-digit numbers.

## Measurement and Data 2.MD

## Measure and estimate lengths in standard units.

2.MD.A. 1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
2.MD.A. 2 Measure the 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.
2.MD.A. 3 Estimate lengths using units of inches, feet, centimeters, and meters.
2.MD.A. 4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

Unit 6 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.6 Benchmark 2: Estimate and measure lengths in inches, feet, centimeters, and meters.

Unit 6 2.3, 2.4, 2.6
Benchmark 1: Recognize that, when measuring the same length, larger units yield smaller counts (and vice versa). Benchmark 2: Estimate and measure lengths in inches, feet, centimeters, and meters.

Unit 6 2.1, 2.2, 2.3, 2.4, 2.6
Benchmark 2: Estimate and measure lengths in inches, feet, centimeters, and meters.

Unit 6 1.4, 1.6, 2.1, 2.2, 2.4, 2.5
Benchmark 2: Estimate and measure
lengths in inches, feet, centimeters, and meters.
Benchmark 4: Solve comparison and other story problems about lengths.

## Relate addition and subtraction to length.

2.MD.B. 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.

Unit 6 1.4, 1.6, 2.1, 2.2, 2.4, 2.5, 2.6
Benchmark 4: Solve comparison and other story problems about lengths.

## Common Core State Standards for Mathematics Grade 2

2.MD.B. 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.

Grade 2
Investigations 3
Unit 1 1.1, 1.2, $C R$ 1.3, 1.4, $C R 1.6,2.1,2.2$, CR 2.4, 2.6, 3.1, 3.2, CR 3.3, CR 3.4, CR 3.5, 3.7, Investigation 4

Benchmark 3: Solve a comparison story problem with the difference unknown. Benchmark 4: Solve put together/take apart story problems with the total unknown, and add to and take from story problems with the result unknown.
Unit 2 CR 2.1, CR 3.4
Unit 3 1.4, 1.5, 1.6, 1.7, 1.8, 2.1, 2.2, 2.6, 2.7, 2.8, 3.1, CR 3.2, 3.3, 3.4, 3.6, 3.7

Benchmark 1: Solve a put together/take apart story problem with both addends unknown, and find all the possible combinations.
Benchmark 2: Solve a put together/take apart story problem with one addend unknown.
Benchmark 3: Solve two-step story problems about money
Benchmark 6: Solve story problems with an unknown change.
Benchmark 7: Solve story problems with an unknown start.
Unit 5 1.1, 1.5, 3.1, 3.2, 3.6
Benchmark 1: Solve a 2-step story problem
that involves finding the difference between a 2-digit number and 100. Benchmark 7: Solve comparison story problems with a bigger unknown.
Unit 6 CR 2.1
Unit 8 1.1, 1.2, 1.3, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11 Benchmark 1: Solve a comparison story problem with a smaller unknown. Benchmark 4: Fluently subtract 2-digit numbers.

## Work with time and money.

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

Unit 2 CR 1.3, CR 2.2, CR 3.7, CR 3.8
Unit 3 CR 2.4, CR 2.9, CR 3.4, 3.6
Unit 4 CR 1.3, CR 1.6, CR 2.3
Unit 5 CR 1.1, CR 3.1
Unit 6 CR 1.3, CR 2.5
Unit 7 CR 1.2, CR 1.4
Unit 8 CR 1.1, CR 1.4, CR 1.8, 1.9
Benchmark 2: Name, notate, and tell time to the nearest 5 minutes using analog and digital formats and associate A.M. and P.м. with time of day.

## Common Core State Standards for Mathematics Grade 2

2.MD.C. 8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and $\not \subset$ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?

## Grade 2 Investigations 3

Unit 1 1.4, 3.3, 3.4, 3.6, 3.7
Benchmark 1: Recognize and identify coins and their values.
Unit 3 1.3, $C R$ 1.4, $C R 1.5, C R 2.5,2.7,2.8,2.9$, CR 3.1, 3.2
Benchmark 3: Solve two-step story problems about money.
Unit 5 1.4, 1.5, 1.6, 2.2
Benchmark 1: Solve a 2-step story problem that involves finding the difference between a 2-digit number and 100.
Unit 8 1.4, 1.5, 1.6, CR 1.7, 1.9, 1.10, 1.11, CR 2.6, CR 2.9

## Represent and interpret data.

2.MD.D. 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.D. 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 puttogether, take-apart, and compare problems using information presented in a bar graph.

Unit 4 2.1, 2.4, 2.5, 2.6
Benchmark 2: Create, describe, and interpret a variety of data representations, including picture graphs and bar graphs. Benchmark 3: Order, represent, and describe a set of numerical data.
Unit 6 2.4, 2.5
Benchmark 3: Represent measurement data on a line plot.

Unit 4 1.1, 1.2, 1.4, 1.5, 1.6, 2.1, 2.2, 2.4
Benchmark 1: Organize a set of data into up to four categories.
Benchmark 2: Create, describe, and interpret a variety of data representations, including picture graphs and bar graphs.
Benchmark 3: Order, represent, and describe a set of numerical data.

## Geometry 2.G

## Reason with shapes and their attributes.

2.G.A. 1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. (Sizes are compared directly or visually, not compared by measuring.)

Unit 1 1.2, 1.3, 1.4, 1.5
Unit 2 Investigation 1, Investigation 2, 3.1 Benchmark 1: Identify defining attributes of 2-D and 3-D shapes (number and shape of faces, number and length of sides, number of angles and vertices) and draw shapes with those attributes.
Benchmark 2: Make a rectangle out of same size squares and specify the number of rows and the number of squares in each row.

## Common Core State Standards for Mathematics Grade 2

## Grade 2

## Investigations 3

2.G.A. 3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.
2.G.A. 2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.

Unit 2 2.3, 2,4, 2.5, 2.6
Benchmark 1: Identify defining attributes of 2-D and 3-D shapes (number and shape of faces, number and length of sides, number of angles and vertices) and draw shapes with those attributes.
Benchmark 2: Make a rectangle out of same size squares and specify the number of rows and the number of squares in each row.
Unit 7 CR 2.2, CR 2.4
Unit 2 Investigation 3
Benchmark 3: Recognize that [halves, thirds, fourths] of the same whole can look different.
Benchmark 4: Partition 2-D shapes into halves, thirds and fourths and name the regions.

