Content Area:	MATHEMATICS	Grade Level:	2
Domain:	Operations and Algebraic Thinking		

Common Core State Standards in Mathematics (CCSSM)

Represent and solve problems involving addition and subtraction.

2.OA.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.

Understandings	Essential Questions
Students will understand that: • addition involves adding to and putting together. • subtraction involves taking from, taking apart, and comparing. • missing numbers in a math sentence can be found using addition and subtraction. • a symbol can represent an unknown. • the unknown may be located in any position in the equation. • objects, drawings, and equations can be used to solve problems.	• How can one find the total of parts? • How can one find the missing part of a whole?
Knowledge: Students will know…	**Skills: Students will be able to . . .**
• the meaning of addition. • the meaning of subtraction. • there are multiple interpretations of addition and subtraction. • some problems take more than one step to solve.	• use addition and subtraction within 100 to solve word problems that involve one-and two-step problems. • use objects and drawings to represent problems. • use equations with a symbol for the unknown number to represent the problem.

RESOURCES

- enVision Math Topics 1-9
- Supplemental lessons

Content Area:	MATHEMATICS	Grade Level:	2
Domain:	Operations and Algebraic Thinking		

Common Core State Standards in Mathematics (CCSSM)

Add and subtract within 20.

2.OA.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.

Understandings	Essential Questions
Students will understand that: • there are multiple strategies to add and subtract.	• How can a problem be simplified? • What strategies are available to determine how much or how many we have?
Knowledge: Students will know…	**Skills: Students will be able to . . .**
• numbers that make 10 will help solve problems. • numbers can be decomposed into simpler terms. • the inverse relationship between addition and subtraction. • solutions can be found by forming equivalent but easier or known sums.	• fluently add within 20 using mental strategies. • fluently subtract within 20 using mental strategies.

RESOURCES

- enVision Math Topics 2, 3
- Supplemental lessons

Content Area:	MATHEMATICS	Grade Level:	2
Domain:	Operations and Algebraic Thinking		

Common Core State Standards in Mathematics (CCSSM)

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

2.OA.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 2s; write an equation to express an even number as a sum of two equal addends.

2.OA.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.

Understandings	Essential Questions
Students will understand that: • a total number of objects can be found in a rectangular array by finding the sum of equal addends. • odd numbers cannot be paired and even numbers can be paired. • even numbers can be counted using skip-counting by 2s.	• Why would one need to pair things?
Knowledge: Students will know…	**Skills: Students will be able to . . .**
• odd numbers cannot be paired completely and even numbers can. • that when counting by 2s, even numbers will finish the group of	• determine whether a group of objects (up to 20) has an odd or even number of members • use addition to find the total number of objects in a rectangular array (with up to 5 rows and 5 columns). • write an equation expressing the total of a rectangular array as a sum of equal addends.

RESOURCES

- enVision Math Topics 4, 5
- Supplemental lessons

Content Area:	MATHEMATICS	Grade Level:	2
Domain:	Number and Operations in Base Ten		

Common Core State Standards in Mathematics (CCSSM)

Understand place value.

2.NBT.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:

a. 100 can be thought of as a bundle of ten tens — called a "hundred."

b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

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

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

2.NBT.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.

Understandings	Essential Questions
Students will understand that: • the location of digits in a number determines the value of the number. • to compare two numbers, one must compare the digits in each place, starting with the largest place.	• Why is place value important?
Knowledge: Students will know…	**Skills: Students will be able to . . .**
• the three digits in a three-digit number represent the amount of hundreds, tens and ones, respectively. • the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	• identify one hundred as a bundle of ten tens and ten as a bundle of ten ones. • count within 1000. • skip-count by 5s, 10s, and 100s. • read numbers to 1000. • write numbers to 1000 using base-ten numerals, number names, and expanded form. • compare three digit numbers using <, =, and >.

RESOURCES

- enVision Math Topics 5, 6, 10
- Supplemental lessons

Content Area:	MATHEMATICS	Grade Level:	2
Domain:	Number and Operations in Base Ten		

Common Core State Standards in Mathematics (CCSSM)

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

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

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

2.NBT.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.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.9 Explain why addition and subtraction strategies work, using place value and the properties of operations.

Understandings	Essential Questions
Students will understand that : • concrete models, drawings, strategies based on place value, properties of operations, and/or the relationship between addition and subtraction can help one solve problems. • when adding 10 or 100, one must add one to the tens-digit or one to the hundreds-digit and not change the ones-digit. • when subtracting 10 or 100, one must subtract one from the tens-digit or one from the hundreds-digit and not change the ones-digit	• How does place value help one find the answers to addition and subtraction problems?
Knowledge: Students will know…	**Skills: Students will be able to . . .**
• properties of operations to add and subtract. • the values of the digits in a three-digit number. • sometimes it is necessary to compose or decompose tens or hundreds.	• fluently add and subtract within 100 • add up to four two-digit numbers, using strategies using place value and properties of operations. • add and subtract within 1000 • mentally add 10 or 100 to a given number 100-900. • mentally subtract 10 or 100 from a given number 100-900. • explain why addition and subtraction strategies work, using place value and the properties of operations.

RESOURCES

- enVision Math Topics 1-3, 5-11, 14
- Supplemental lessons

Content Area:	MATHEMATICS	Grade Level:	2
Domain:	Measurement and Data		

Common Core State Standards in Mathematics (CCSSM)

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 units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

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.

Understandings	Essential Questions
Students will understand that: • the difference between non-standard and standard measurement. • measurement tools vary in the size of the unit on them; this variation will affect the choice of tools.	• Why do we measure objects? • How do we measure objects? • Why do we need standard units of measurement?
Knowledge: Students will know…	**Skills: Students will be able to . . .**
• appropriate tools must be used in order to properly measure an object. • the approximate length of an inch, foot, centimeter, and meter.	• select an appropriate tool to measure an object. • measure the length of an object. • measure the length of an object with two different tools. • describe how the measurements of one object differ when using two different tools (relate the measurement to the size of the unit chosen). • estimate lengths using units of inches, feet, centimeters, and meters. • measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

RESOURCES

- enVision Math Topic 15
- Supplemental lessons

Content Area:	MATHEMATICS	Grade Level:	2
Domain:	Measurement and Data		

Common Core State Standards in Mathematics (CCSSM)

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.

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.

Understandings	Essential Questions
Students will understand that: • addition and subtraction can be used to solve word problems involving lengths that are given in the same units. • whole numbers can be represented as the lengths from 0 to the number located on an equally-spaced number line. • whole-number sums and differences can be represented on a number line.	• How are the locations of numbers on a number line related to length? • How can addition and subtraction be used to find lengths?
Knowledge: Students will know…	**Skills: Students will be able to . . .**
• drawings (such as drawings of rulers) can be used to solve problems involving length. • equations with an unknown can be used to solve problems involving length	• add within 100 to solve word problems involving length. • subtract within 100 to solve word problems involving length. • represent whole numbers on a number line as length from 0. • represent whole numbers sums and differences with 100 on a number-line diagram

RESOURCES

- enVision Math Topics 8, 9, 15
- Supplemental lessons

Content Area:	MATHEMATICS	Grade Level:	2
Domain:	Measurement and Data		

Common Core State Standards in Mathematics (CCSSM)

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

Understandings	Essential Questions
Students will understand that: • when time passes, the hour hand and the minute hand move at different rates. • different coins have different values, not related to the size of the coin.	• How do the positions of the hands on an analog clock indicate the time? • How do the numbers on a digital clock indicate the time? • How do we determine how much money is needed and how money one has?
Knowledge: Students will know…	**Skills: Students will be able to . . .**
• between the hour hand and the minute hand. • on an analog clock, on the hour, the hour hand is pointing exactly to the number that represents the hour; on the half-hour, the hour hand is pointing exactly half-way between two numbers. • on a digital clock, the digits to the left of the colon represent the hour and the digits to the right of the colon represent the minutes. • the value of a dollar bill, quarter, dime, nickel and penny.	• tell and write time to the nearest five minutes using a.m. and p.m., on an analog clock. • tell and write time to the nearest five minutes using a.m. and p.m., on a digital clock. • solve word problems involving dollar bills, quarters, dimes, nickels and pennies using $ and ¢ symbols appropriately.

RESOURCES

- enVision Math Topics 13, 14, 16
- Supplemental lessons

Content Area:	MATHEMATICS	Grade Level:	2
Domain:	Measurement and Data		

Common Core State Standards in Mathematics (CCSSM)

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[1] using information presented in a bar graph.

Understandings	Essential Questions
Students will understand that: • there are many ways to analyze data.	• How can representing data help us to interpret it and draw conclusions
Knowledge: Students will know…	**Skills: Students will be able to . . .**
• the difference between a picture graph and a bar graph. • how to make a line plot.	• generate measurement data by measuring lengths of several objects to the nearest whole unit • generate measurement data by making repeated measurements of the same object. • show measurements by making a line plot, where the horizontal scale is marked off in whole-number units. • organize data with up to four categories. • represent data with up to four categories using a picture graph. • represent data with up to four categories using a bar graph. • solve simple put-together, take-apart, and compare problems using a bar graph

RESOURCES

- enVision Math Topic 16
- Supplemental lessons

Content Area:	MATHEMATICS	Grade Level:	2
Domain:	Geometry		

Common Core State Standards in Mathematics (CCSSM)

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.[1] Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.

2.G.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.

2.G.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.

Understandings	Essential Questions
Students will understand that: • shares of a whole must always be equal. • decomposing into more equal shares creates smaller shares. • equal shares of identical wholes need not have the same shape.	• Why do we need to identify shapes? • Why would we partition shapes?
Knowledge: Students will know…	**Skills: Students will be able to . . .**
• the characteristics of triangles, quadrilaterals, pentagons, hexagons, and cubes. • the word half , third, and fourth refers, respectively, to having 2, 3, and 4equal parts.	• recognize shapes having specified attributes. • draw shapes having specified attributes. • identify triangles, quadrilaterals, pentagons, hexagons, and cubes. • partition a rectangle into rows and columns of the same-size squares. • count the squares in a partitioned rectangle to find the total number. • partition circles into two, three, or four equal shares. • partition rectangles into two, three, or four equal shares. • appropriately use the words halves, thirds, fourths and quarters and the phrases half of, a third of, a fourth of, and quarter of. • describe the whole as two halves, three thirds, or four fourths. • identify equal shares of identical wholes even though they do not have the same shape.

RESOURCES

- enVision Math Topic 12
- Supplemental lessons

September 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
2	3 Labor Day	4 Beginning of Year Activities First Day of School Early Dismissal	5 Beginning of Year Activities Early Dismissal	6 Beginning of Year Activities	7 Beginning of Year Activities	8
9	10 1.1	11 1.2	12 1.3	13 1.4	14 1.5	15
16	17 1.6	18 National Play Doh Day (Teacher Resources)	19 1.7	20 "Two Ways to Count to Ten" (Resource Room)	21 Ms. Schannen's CD - Algebra #'s 1, 2, 3	22
23	24 Buffer	25 12.1	26 12.2	27 12.3	28 12.4	29
30						

October 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 12.5	2 12.6	3 12.6 Early Dismissal	4 Ms. Schannen's CD- Pattern Blocks "Two Ducks" & "Pattern Block Fillins"	5	6
7	8 School Closed - Columbus Day	9 12.8	10 Topic Test & EnVisions Topic 12 Opener "Math Project"	11 Buffer	12 2.1	13
14	15 2.2	16 2.3	17 2.4	18 2.5	19 2.6	20
21	22 2.7	23 Ms. Schannen's CD - Algebra #'s 8a1-8c4 (levels S-U)	24 Topic Test & EnVisions Topic 2 Opener "Math Project"	25 13.1	26 13.2	27
28	29 13.3	30 13.4	31 Pumpkin Math/ Candy Sorting (Teacher Reasources)			

November 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 13.5	2 "Using Coins to Buy Things" *pp. 1-5*	3
4	5 "Making Change by Counting Up" *pp. 6-10*	6 "Pigs Will Be Pigs" (Resource Room)	7 Buffer Early Dismissal	8 3.1	9 3.2	10
11	12 3.3	13 3.4	14 3.5 Early Dismissal	15 3.6	16 Ms. Schannen's CD - "The Grouchy Ladybug" (under Literature)	17
18	19 Topic Test	20 14.1	21 School Closed	22 School Closed Thanksgiving	23 School Closed	24
25	26 14.2	27 14.3	28 14.4	29 EnVisions Topic 14 Opener "Math Project"	30 Topic Test	

December 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3 Buffer	4 4.1	5 4.2 Early Dismisal	6 4.3	7 4.4	8
9	10 "Two of Everything" (Resource Room)	11 Topic Test	12 EnVisions Topic 15 Opener "Math Project"	13 15.1	14 15.2	15
16	17 15.3	18 15.4	19 15.5	20 15.6	21 School Closed	22
23 30	24 School Closed - Winter Recess 31 New Year's Eve	25 School Closed - Winter Recess Christmas Day	26 School Closed - Winter Recess	27 School Closed - Winter Recess	28 School Closed - Winter Recess	29

January 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 School Closed - New Year's Day	2 School Closed	3 15.7	4 15.8	5
6	7 15.9	8 "Inch by Inch" (Resource Room)	9 Topic Test	10 Buffer	11 5.1	12
13	14 5.2	15 5.3	16 5.4	17 5.5	18 5.6	19
20	21 School Closed MLK Jr. Day	22 5.7	23 Measure your Foot Day (Teacher Resources)	24 Ms. Schanne's CD - Number Sense #20a-b "Find the Place Value"	25 Topic Test	26
27	28 "Mystery Number" *pp. 11-18*	29 National Puzzle Day	30 6.1	31 6.2 Early Dismissal		

February 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 6.3	2
3	4 6.4	5 6.5	6 6.6	7 "Containers" *pp. 19-26*	8 Topic Test & Ms. Schannen's CD - Number Sense "Arrow Paths"	9
10	11 Buffer	12 7.1	13 7.2	14 Valentine's Day Candy Sorting/ Graphing (Teacher Resources)	15 School Closed	16
17	18 School Closed - Mid- Winter Recess President's Day	19 7.3	20 7.4	21 7.5	22 100th Day of School (Teacher Resources)	23
24	25 Topic Test & Ms. Schannen's CD - Number Sense "Arrow Paths"	26 16.1	27 16.2	28 16.3		

March 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 16.4	2
3	4 16.5	5 16.6	6 "Pictograph" & "Tables & Graphs" *pp. 27-42*	7 Topic Test	8 Buffer	9
10	11 8.1	12 8.2	13 8.3	14 8.4	15 St. Patrick's Day Lucky Charms (Teacher Resources)	16
17	18 National Rubber Band Day - Geoboard Activity (Teacher Resource)	19 85	20 8.6	21 8.7	22 8.8	23
24 31 EASTER	25 8.9	26 "Globs of Goo" *pp. 43-50*	27 Topic Test	28 Buffer Early Dismissal	29 School Closed - Good Friday	30

April 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 School Closed - Spring Recess	2 School Closed - Spring Recess	3 School Closed - Spring Recess	4 School Closed - Spring Recess	5 School Closed - Spring Recess	6
7	8 9.1	9 9.2	10 9.3	11 9.4	12 9.5	13
14	15 9.6	16 9.7 Early Dismissal	17 9.8 Early Dismissal	18 9.9	19 "Subtraction Strategies" *pp. 51-56*	20
21	22 Topic Test	23 Buffer	24 10.1	25 10.2	26 10.3	27
28	29 10.4	30 10.5				

May 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 10.6	2 10.7	3 10.8	4
5	6 10.9	7 Ms. Schannen's CD - Number Sense "Find the Place Value- Thousandths"	8 Topic Test	9 Buffer	10 11.1 Early Dismissal	11
12 Mother's Day	13 11.2	14 11.3	15 11.4	16 11.5	17 11.6	18
19	20 11.7	21 11.8	22 11.9	23 EnVisions Topic 11 Opener "Math Project"	24 School Closed	25
26	27 School Closed - Memorial Day	28 Topic Test	29 STEM FAIR	30 STEM FAIR	31 STEM FAIR	

June 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3 STEM FAIR	4 STEM FAIR	5 STEM FAIR	6 STEM FAIR	7 STEM FAIR	8
9 Father's Day	10 STEM FAIR	11 STEM FAIR	12 STEM FAIR	13 STEM FAIR	14 STEM FAIR	15
16	17 STEM FAIR	18 STEM FAIR	19 STEM FAIR	20 STEM FAIR	21 STEM FAIR	22
23/30	24 STEM FAIR	25 STEM FAIR	26 STEM FAIR	27 STEM FAIR	28 STEM FAIR Early Dismissal	29