Grade 1 Mathematics

Units of Study	
Unit 1	Addition within 10 (30 days) August 16- September 27
Unit 2	Subtraction within 10 (Culmination Addition/Subtraction within 10) (25 days) September 28-November 3
Unit 3	Teen Numbers (13 days) November 4- November 23
Unit 4	Addition within 20 (5 days) November 29- December 3
Unit 5	Subtraction within 20 (Culmination Addition/Subtraction within 20) (5 days) December 6-December 10
Unit 6	Understanding Tens and Ones (18 days) December 13- January 19
Unit 7	Addition within 100 (23 days) January 20- February 23
Unit 8	Geometry- Shapes (14 days) February 24-March 15
Unit 9	Geometry- Fractions (4 days) March 16-March 28
Unit 10	Time (5 days) March29-April 4
Unit 11	Money (5 days) April 5-April 11
Unit 12	Measurement (20 days) April 12- May 10
Unit 13	Data (13 days) May 11- May 28

Green: Priority Standards **Pink**: Supporting Standards

		Units												
			1	2	3	4	5	6	7	8	9	10	11	12	13
Standards	NS	1						X							
		2			X			X							
		3	X												
		4						X							
		5						X	X						
		6						X							
	CA	1	X	X		X	X								
		2	X	X		X	X								
		3	X	X		X	X								
		4				X									
		5							X						
		6	X	X		X	X								
		7							X						
	G	1								X					
		2								X					
		3								X					
		4									X				
	M	1												X	
		2										X			
		3											X		
	DA	1													X

Unit 1- **Addition within 10**

General Description of the Unit

Students will demonstrate fluency with addition facts within 10 using a variety of strategies such as counting on, making 10, decomposing numbers (break numbers into two parts to represent a whole). Students will solve real-world problems involving addition to 10, again using a variety of strategies like above or with objects, drawings, etc.

Priority Standards

- 1.CA.1: Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Understand the role of 0 in addition and subtraction.
- 1.CA.2: Solve real-world problems involving addition and subtraction within 20 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem).

Supporting Standards

- 1.NS.3: Match the ordinal numbers first, second, third, etc., with an ordered set up to 10 items.
- 1.CA.3: Create a real-world problem to represent a given equation involving addition and subtraction within 20.
- 1.CA.6: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false (e.g., Which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2)

Proficiency Scales **1.CA.1** **1.CA.2**	**Tiered Assessments**
Enduring Understandings ● Addition involves combining numbers and is used in many real-world situations. ● There are many mental strategies that make adding numbers easier, such as making a ten and finding known sums. ● The equal sign means that both values on either side of it are equivalent. ● Equations can be written in different orders and ways as long as both sides remain balanced. ● Ordinal numbers are used to indicate the position of something.	**Essential Questions** ● When have you needed to use addition at home? How many examples can you think of? ● How would you describe addition to someone? How would you describe an addition word-problem? ● What does it mean when two things are equal? What are examples of things that are equal? What are examples of things that are not equal? ● When do you use ordinal numbers at school? At home? What is an example of a time you would choose to be 7th? What is an example of a time you would want to be 1st?

Key Concepts	**Related Concepts**	**Assessment Vocabulary**
● I can fluently add within 20 by counting on. (1.CA.1) ● I can fluently add within 20 by making a group of ten. (1.CA.1) ● I can fluently add within 20 using the relationship between addition and subtraction. (1.CA.1)	● I can match numbers with their ordinals in a set with up to 10 items. (1.NS.3) ● I can create a real-world problem involving addition within 20. (1.CA.3) ● I can understand what the equal sign means. (1.CA.6)	● Count on ● Ordinal ● Addend ● Addition ● Decompose ● Equal Sign ● Equation ● Plus ● Sum

• I can fluently add within 20 by creating easier, known sums. (1.CA.1) • I can solve real-world problems involving addition within 20. (1.CA.2) • I can use objects, drawings, and equations to solve real-world addition and subtraction problems within 20. (1.CA.2)	• I can determine if addition problems are true or false. (1.CA.6)	• Symbol

Mathematical Processes

- *PS.1 Make sense of problems and persevere in solving them.*
  - Apply and adapt a variety of appropriate strategies to solve problems.
  - Monitor and reflect on my progress and change strategy if needed.

Resources

Textbook	Digital	Manipulatives
Lesson 1 Count on to Add	IDOE Examples/Tasks 1.NS.3 IDOE Examples/Tasks 1.CA.2	Bear Counters Digital Ten Frames

Lesson 6 Doubles Doubles plus 1 **Lesson 7 Number Partners for 6 and 7** **Lesson 8 Number Partners for 8 and 9** **Lesson 9 Number Partners for 10** **Lesson 10 Understand the Equal Sign**	IDOE Examples/Tasks 1.CA.1 IDOE Examples/Tasks 1.CA.3 IDOE Examples/Tasks 1.CA.6 iReady/Ways to Make Ten 1.CA.1 iReady/Count On to Add 1.CA.1 iReady/Doubles Addition Facts 1.CA.1 iReady/Number Pairs for Sums to 10 1.CA.1 iReady/Find Missing Addends 1.CA.2 iReady/Solve Word Problems with Totals to 10 1.CA.2 iReady/True and False Equations 1.CA.6 iReady/Find the Unknown Number 1CA.2	Digital Ten Frames V2 Digital Base Ten Blocks Base Ten Blocks V2 Digital Rekenrek to 20 Two Color Counter Whiteboard Interactive 120's Chart Pan Balance

Unit 2- **Subtraction within 10 (Culmination Addition/Subtraction within 10)**

General Description of the Unit Students will demonstrate fluency with subtraction facts within 10 using a variety of strategies such as counting on, making 10, decomposing numbers (break numbers into two parts to represent a whole). Students will solve real-world problems involving subtraction to 10, again using a variety of strategies like above or with objects, drawings, etc.	
Priority Standards	**Supporting Standards**

• 1.CA.1: Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Understand the role of 0 in addition and subtraction. • 1.CA.2: Solve real-world problems involving addition and subtraction within 20 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem).	• 1.CA.3: Create a real-world problem to represent a given equation involving addition and subtraction within 20. • 1.CA.6: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false (e.g., Which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2).
Proficiency Scales 1.CA.1 1.CA.2	**Tiered Assessments**
Enduring Understandings • Addition and subtraction are inverse operations. • Addition strategies such as counting on and missing addends can simplify subtraction problems.	**Essential Questions** • How many different ways can you represent an addition problem? How many different ways can you represent a subtraction problem?

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- Models and drawings can be used to find sums and differences.
- Unknowns can be used in all parts of addition and subtraction problems/equations.

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- How can understanding addition help solve a subtraction problem? How can understanding subtraction help solve an addition problem?
- What is your favorite strategy for adding? What is your favorite strategy for subtracting?
- What is your favorite strategy for checking your answer when adding or subtracting?
- Can you think of a story problem that you would need to add to solve? Subtract? How do you know?
- When do you use addition at home? Subtraction?

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Key Concepts

- I can fluently add within 20 by counting on. (1.CA.1)
- I can fluently add within 20 by making a group of ten. (1.CA.1)
- I can fluently add within 20 using the relationship between addition and subtraction. (1.CA.1)
- I can fluently add within 20 by creating easier, known sums. (1.CA.1)
- I can fluently subtract within 20 by counting back. (1.CA.1)
- I can fluently subtract within 20 by decomposing a number leading to a ten. (1.CA.1)
- I can fluently subtract within 20 by using the relationship

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Related Concepts

- I can create a real-world problem involving addition within 20. (1.CA.3)
- I can create a real-world problem involving subtraction within 20. (1.CA.3)
- I can understand what the equal sign means. (1.CA.6)
- I can determine if addition problems are true or false. (1.CA.6)
- I can determine if subtraction problems are true or false. (1.CA.6)

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Assessment Vocabulary

- Addend
- Addition
- Decompose
- Difference
- Equal Sign
- Equation
- Subtraction
- Sum
- Symbol

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between addition and subtraction. (1.CA.1) ● I can demonstrate the role of 0 in addition and subtraction. (1.CA.1) ● I can solve real-world problems involving addition within 20. (1.CA.2) ● I can solve real-world problems involving subtraction within 20. (1.CA.2) ● I can use objects, drawings, and equations to solve real-world addition and subtraction problems within 20. (1.CA.2)		

Mathematical Processes

- *PS.1 Make sense of problems and persevere in solving them.*
    - Discuss the different ways to start a given problem and develop a plan for a solution path.
    - Evaluate whether my solution makes sense in the context of a problem.

Resources		
Textbook	**Digital**	**Manipulatives**
Lesson 2 Count on to Subtract **Lesson 3 Add and Subtract in Word Problems** **Lesson 4 Understand Missing Addends** **Lesson 5 Subtract to Compare in Word Problems** **Lesson 11 Facts I Know**	IDOE Examples/Tasks 1.CA.1 IDOE Examples/Tasks 1.CA.2 IDOE Examples/Tasks 1.CA.3 IDOE Examples/Tasks 1.CA.6 iReady/Subtraction Within 20 1.CA.1 iReady/Addition and Subtraction Facts 1.CA.1 iReady/Count on to Subtract 1.CA.1	Base Ten Blocks 120 Board Unifix Cubes Digital Ten Frames Digital Ten Frames V2 Digital Base Ten Blocks Base Ten Blocks V2 Digital Rekenrek to 20 Two Color Counter Whiteboard Interactive 120's Chart Pan Balance

Unit 3- **Teen Numbers**

General Description of the Unit Students will understand that 10 can be thought of as 1 group of ten ones that combined is called a "ten". This leads them to understanding teen numbers are composed of that same number of ones *or* a ten with ones.	
Priority Standards	**Supporting Standards**

• 1.NS.2: Understand that 10 can be thought of as a group of ten ones — called a “ten." Understand that the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. Understand that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).	• N/A
Proficiency Scales **1.NS.2**	**Tiered Assessments**
Enduring Understandings • Teen numbers are composed of one ten and some ones and can also be represented with all ones. • Teen numbers are two-digit numbers that start with a 1, and the 1 represents one ten, and the second digit represents how many ones. • Teen numbers can be represented with numerals, objects, ten frames, on the hundreds chart, with base ten blocks, etc. • Two-digit numbers that end in 0 are composed of some tens and no ones. The first digit represents how many tens there are.	**Essential Questions** • What are all the ways you can represent the number 17? How are your models alike? How are they different? • How are the numbers 4 and 14 alike? How are they different? • What patterns do you notice in the numbers 20,30,40,50, etc? • How are the numbers 18 and 80 alike? How are they different?

Key Concepts	**Related Concepts**	**Assessment Vocabulary**

• I can understand that 10 ones make a group called a "ten". (1.NS.2) • I can understand that numbers from 11 to 19 are composed of a ten and 1 to 9 ones. (1.NS.2) • I can understand that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). (1.NS.2)	• **N/A**	• Compose • Equal • Greater Than • Less Than • Ones • Place-Value • Tens

Mathematical Processes

- *PS.1 Make sense of problems and persevere in solving them.*
  - Build new mathematical knowledge through problem solving.
- *PS.8 Look for and express regularity in repeated reasoning*
  - Self-assess to see whether a strategy makes sense as I work.

Resources

Textbook	Digital	Manipulatives
Lesson 12 Understand Teen Numbers **Lesson 13 Understand Sums Greater Than 10** **Lesson 14 Make a Ten To Add**	IDOE Examples/Tasks 1.NS.2 iReady/Teen Numbers 1NS.2 iReady/Tens and Ones 1.NS.2	Unifix Cubes Ten Frame Base Ten Blocks Base Ten Blocks Version 2 Two Color Counters Rekenrek

Unit 4- **Addition within 20**

General Description of the Unit	
Students will demonstrate fluency with addition facts to 20 using a variety of strategies such as counting on, making 10, decomposing numbers (break numbers into two parts to represent a whole). Students will understand the role of 0 in addition. Students will solve real-world problems involving addition to 20, again using a variety of strategies like above or with objects, drawings, etc.	
Priority Standards	**Supporting Standards**

• 1.CA.1: Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Understand the role of 0 in addition and subtraction. • 1.CA.2: Solve real-world problems involving addition and subtraction within 20 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem).	• 1.CA.3: Create a real-world problem to represent a given equation involving addition and subtraction within 20. • 1.CA.4: Solve real-world problems that call for addition of three whole numbers whose sum is within 20 (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem). • 1.CA.6: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false (e.g., Which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2)
Proficiency Scales 1.CA.1 1.CA.2	**Tiered Assessments**
Enduring Understandings • There are many strategies to build fluency for adding within 20, such as: making a ten, doubles, doubles +1, near doubles, etc.	**Essential Questions** • How can I use the properties of addition to help me add three or more numbers? • Why is it easy to add or subtract ten to or from another number?

• There are many real-world situations that require addition. • When adding three numbers, you can add the numbers in any order. It is sometimes helpful to find two numbers that you can apply a strategy with, to start. (i.e. 5 + 7 + 5 = could be more easily solved as 5 +5 = 10, then adding 7.)	• How can I find the equivalent sum by creating the known? • What problem would I have at home that would involve adding or subtracting? • How can making groups of ten help me solve this addition or subtraction problem?

Key Concepts	**Related Concepts**	**Assessment Vocabulary**
• I can fluently add within 20 by counting on. (1.CA.1) • I can fluently add within 20 by making a group of ten. (1.CA.1) • I can fluently add within 20 using the relationship between addition and subtraction. (1.CA.1) • I can fluently add within 20 by creating easier, known sums. (1.CA.1) • I can fluently subtract within 20 by counting back. (1.CA.1) • I can fluently subtract within 20 by decomposing a number leading to a ten. (1.CA.1) • I can fluently subtract within 20 by using the relationship	• I can create a real-world problem involving addition within 20. (1.CA.3) • I can create a real-world problem involving subtraction within 20. (1.CA.3) • I can add three whole numbers whose sum is within 20 to solve real-world addition problems. (1.CA.4) • I can use objects, drawings, and equations to add three whole numbers whose sum is within 20 to solve real-world problems. (1.CA.4) • I can understand what the equal sign means. (1.CA.6)	• Addend • Addition • Decompose • Equal Sign • Equation • Plus • Sum • Symbol

between addition and subtraction. (1.CA.1) ● I can demonstrate the role of 0 in addition and subtraction. (1.CA.1) ● I can solve real-world problems involving addition within 20. (1.CA.2) ● I can solve real-world problems involving subtraction within 20. (1.CA.2) ● I can use objects, drawings, and equations to solve real-world addition and subtraction problems within 20. (1.CA.2)	● I can determine if addition problems are true or false. (1.CA.6) ● I can determine if subtraction problems are true or false. (1.CA.6)	

Mathematical Processes

- *PS.2 Reason abstractly and quantitatively.*
  - Determine the meaning of symbols, key terms, and other mathematical words or phrases and how they contribute to the solution pathway.
- *PS.3 Construct convincing arguments and critique the reasoning of others.*
  - *o* Justify my reasoning for my solution making sense

Resources

Textbook **Lesson 15 Add Three Numbers**	**Digital** IDOE Examples/Tasks 1.CA.1 IDOE Examples/Tasks 1.CA.2 IDOE Examples/Tasks 1.CA.3 IDOE Examples/Tasks 1.CA.4 IDOE Examples/Tasks 1.CA.6 iReady/Make a Ten to Add Within 20 1.CA.1 iReady/Subtraction Within 20 1.CA.1 iReady/Totals Greater than 10 1.CA.1 iReady/Use Strategies to Add 3 Numbers 1.CA.4	**Manipulatives** Ten Frame Digital Base Ten Blocks Base Ten Blocks V2 Digital Rekenrek to 20 Two Color Counter Whiteboard Interactive 120's Chart Pan Balance

Unit 5- **Subtraction within 20 (Culmination Addition/Subtraction within 20)**

General Description of the Unit	
Students will demonstrate fluency with subtraction facts within 20 using a variety of strategies such as counting on, making 20, decomposing numbers (break numbers into two parts to represent a whole). Students will understand the role of 0 in addition. Students will solve real-world problems involving subtraction to 20, again using a variety of strategies like above or with objects, drawings, etc.	
Priority Standards ● 1.CA.1: Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number	**Supporting Standards** ● 1.CA.3: Create a real-world problem to represent a given equation involving addition and subtraction within 20.

leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Understand the role of 0 in addition and subtraction. ● 1.CA.2: Solve real-world problems involving addition and subtraction within 20 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem).	● 1.CA.6: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false (e.g., Which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2)
Proficiency Scales 1.CA.1 1.CA.2	**Tiered Assessments**
Enduring Understandings ● There are many strategies to build fluency for subtracting within 20, such as: missing addends, counting backwards, subtracting to ten, etc. ● There are many real-world situations that require addition and subtraction, and it is important to determine the correct operation based on the problem.	**Essential Questions** ● What strategies can I use to help demonstrate fluency in addition and subtraction? ● How do you use a doubles fact to answer a near doubles fact? ● How can you use addition to solve subtraction? ● When trying to solve a problem how do I know whether to add or subtract?

• Addition and subtraction are inverse operations and can be used to solve problems and check answer accuracy.	• How can you use addition facts and doubles to solve subtraction facts?

Key Concepts	**Related Concepts**	**Assessment Vocabulary**
• I can fluently add within 20 by counting on. (1.CA.1) • I can fluently add within 20 by making a group of ten. (1.CA.1) • I can fluently add within 20 using the relationship between addition and subtraction. (1.CA.1) • I can fluently add within 20 by creating easier, known sums. (1.CA.1) • I can fluently subtract within 20 by counting back. (1.CA.1) • I can fluently subtract within 20 by decomposing a number leading to a ten. (1.CA.1) • I can fluently subtract within 20 by using the relationship between addition and subtraction. (1.CA.1)	• I can create a real-world problem involving addition within 20. (1.CA.3) • I can create a real-world problem involving subtraction within 20. (1.CA.3) • I can add three whole numbers whose sum is within 20 to solve real-world addition problems. (1.CA.4) • I can use objects, drawings, and equations to add three whole numbers whose sum is within 20 to solve real-world problems. (1.CA.4) • I can understand what the equal sign means. (1.CA.6) • I can determine if addition problems are true or false. (1.CA.6) • I can determine if subtraction problems are true or false. (1.CA.6)	• Addition • Decompose • Difference • Equal Sign • Equation • Minus • Plus • Subtraction • Sum • Symbol

● I can demonstrate the role of 0 in addition and subtraction. (1.CA.1) ● I can solve real-world problems involving addition within 20. (1.CA.2) ● I can solve real-world problems involving subtraction within 20. (1.CA.2) ● I can use objects, drawings, and equations to solve real-world addition and subtraction problems within 20. (1.CA.2)		

Mathematical Processes

- *PS.3 Construct convincing arguments and critique the reasoning of others.*
  - Write a plan, using appropriate reference materials, to solve a given problem.
- *PS.4 Model with mathematics.*
  - Select, apply, and translate among a variety of mathematical representations to solve problems.

Resources		
Textbook **Lesson 16 Make a 10 To Subtract**	**Digital** IDOE Examples/Tasks 1.CA.1 IDOE Examples/Tasks 1.CA.2 IDOE Examples/Tasks 1.CA.3 IDOE Examples/Tasks 1.CA.6 iReady/Solve Word Problems with Totals to 20 1.CA.2	**Manipulatives** Ten Frame Digital Base Ten Blocks Base Ten Blocks V2 Digital Rekenrek to 20 Two Color Counter Whiteboard Interactive 120's Chart Pan Balance

Unit 6- **Tens and Ones**

General Description of the Unit

Students will count to 120 by ones, fives, and tens from any given number. In addition, they can read and write the numerals that represent the number. Students will understand that 10 can be thought of as 1 group of ten ones that combined is called a "ten". This leads them to understanding teen numbers are composed of that same number of ones *or* a ten with ones. Additionally, they will understand that 10, 20, 30, etc. refer to 1 ten, 2 tens, 3 tens, etc. Students will be able to represent equivalent whole numbers as groups of tens and ones, and they will understand that the individual digits of a 2-digit number represent amounts of tens and ones.

Priority Standards	Supporting Standards
● 1.NS.1: Count to at least 120 by ones, fives, and tens from any given number. In this range, read and write numerals and represent a number of objects with a written numeral.	● 1.NS.4: Use place-value understanding to compare two, two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

• 1.NS.2: Understand that 10 can be thought of as a group of ten ones — called a “ten." Understand that the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. Understand that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). • 1.NS.6: Show equivalent forms of whole numbers as groups of tens and ones, and understand that the individual digits of a two-digit number represent amounts of tens and ones.	• 1.NS.5: Find mentally 10 more or 10 less than a given two-digit number without having to count, and explain the thinking process used to get the answer.
Proficiency Scales 1.NS.1 1.NS.2	**Tiered Assessments**
Enduring Understandings • Two digit numbers are composed of tens and ones. The first digit represents the number of tens, and the second digit represents the number of ones. • 10 more than a number, or 10 less than a number is the same as adding or subtracting one ten, or counting on by 10, or counting back by 10. • Two-digit numbers can be composed of different combinations of tens and ones (i.e. 43 = 4 tens, 3 ones; 3 tens, 13 ones; 2 tens, 23 ones, etc.)	**Essential Questions** • What pattern do you see when you add/subtract 10 to any number? • How do you mentally find a number 10 more or 10 less without having to count? • How are the numbers 27 and 72 alike? How are they different? • What is the largest number you can make using 2 and 5? How do you know? • How many different ways can you make the number 63 using tens and ones?

		• Can you think of an example where 81 would be a big number/amount? Can you think of an example where 81 would be a small number/amount?
Key Concepts • I can count on from any number to 120 by ones. (1.NS.1) • I can count on from any number to 120 by fives. (1.NS.1) • I can count on from any number to 120 by tens. (1.NS.1) • I can read numerals to 120. (1.NS.1) • I can write numerals to 120. (1.NS.1) • I can represent a group of items with a written number to 120. (1.NS.1) • I can understand that 10 ones make a group called a "ten". (1.NS.2) • I can understand that numbers from 11 to 19 are composed of a ten and 1 to 9 ones. (1.NS.2) • I can understand that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight,	**Related Concepts** • I can compare two two-digit numbers using place-value understanding based on meaning of the tens and ones digits. (1.NS.4) • I can use greater than, less than, and equal to symbols to compare two-digit numbers. (1.NS.4) • I can mentally find 10 more than a two-digit number. (1.NS.5) • I can mentally find 10 less than a two-digit number. (1.NS.5) • I can explain how to mentally find 10 more than a two-digit number. (1.NS.5) • I can explain how to mentally find 10 less than a two-digit number. (1.NS.5)	**Assessment Vocabulary** • Compose • Equal • Greater Than • Less Than • Ones • Place-Value • Tens

or nine tens (and 0 ones). (1.NS.2) ● I can show numbers as equal groups of tens and ones. (1.NS.6) ● I can explain that the digits in a two-digit number represent the amount of tens and ones. (1.NS.6)		

Mathematical Processes

- *PS.8 Look for and express regularity in repeated reasoning.*
  - Notice if calculations are repeated and use that information to solve problems.
- *PS.1 Make sense of problems and persevere in solving them*
  Analyze and evaluate the mathematical thinking and strategies of others.

Resources

Textbook	Digital	Manipulatives
Lesson 21 Understand Tens and Ones **Lesson 22 Compare Numbers**	IDOE Examples/Tasks 1.NS.1 IDOE Examples/Tasks 1.NS.2 IDOE Examples/Tasks 1.NS.4	Unifix Cubes Ten Frame Base Ten Blocks

Lesson 23 Add Tens to Any Number **Lesson 24 Add Tens and Add Ones** **Lesson 25 Add and Regroup**	IDOE Examples/Tasks 1.NS.5 IDOE Examples/Tasks 1.NS.6 iReady/Tens and Ones 1.NS.1 iReady/Patterns on a Hundreds Chart 1.NS.1 iReady/Adding Tens to Two Digit Numbers 1.NS.5	Base Ten Blocks Version 2 Two Color Counters Rekenrek Interactive 120's Chart Place-Value Discs

Unit 7- **Addition within 100**

General Description of the Unit Students will add within 100, including adding a two-digit number and a one-digit number, adding a two-digit number and a multiple of 10. They will use models or drawings, and strategies based on place value relationships. In addition, students will understand that in adding two-digit numbers sometimes it is necessary to compose a ten.	
Priority Standards	**Supporting Standards**

• 1.CA.5: Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using models or drawings and strategies based on place-value, properties of operations, and/or the relationship between addition and subtraction; describe the strategy and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones, and that sometimes it is necessary to compose a ten.	• 1.NS.5: Find mentally 10 more or 10 less than a given two-digit number without having to count, and explain the thinking process used to get the answer. • 1.CA.7: Create, extend, and give an appropriate rule for number patterns using addition within 100.
Proficiency Scales **1.CA.5**	**Tiered Assessments**
Enduring Understandings • Two-digit numbers can be added using understanding of place-value. • When adding larger numbers, it is sometimes necessary to compose a new ten, depending on how many ones you have. • There are many different strategies for adding two numbers. When adding two-digit numbers, all of the tens and all of the ones are combined. • There are patterns when finding 10 more and 10 less that can be helpful for mental computations. • Series of numbers can be analyzed to find a relationship between the numbers. These patterns	**Essential Questions** • When setting up a problem how do I know where to place numbers? Why is place-value important? • Can you think of an example where you would need to make/compose a ten when adding two two-digit numbers? What about an example where you would not need to compose a ten? How do you know? • Can you think of a real-world example for the problem 43 + 30 = • Without adding, do you think 28 + 34 will have a sum greater than or less than 50? Why do you think that? • How does making a ten help you add large numbers?

can help figure out numbers that would come next in the pattern.		
Key Concepts ● I can add within 100. (1.CA.5) ● I can add a two-digit number and a one-digit number. (1.CA.5) ● I can add a two-digit number and a multiple of 10. (1.CA.5) ● I can use models, drawings, and various other strategies to add within 100. (1.CA.5) ● I can explain strategies used to add within 100. (1.CA.5) ● I can explain that when adding two-digit numbers within 100, I add ones to ones and tens to tens. (1.CA.5) ● I can make a new group of ten when there are more than 10 ones. (1.CA.5)	**Related Concepts** ● I can mentally find 10 more than a two-digit number. (1.NS.5) ● I can mentally find 10 less than a two-digit number. (1.NS.5) ● I can explain how to mentally find 10 more than a two-digit number. (1.NS.5) ● I can explain how to mentally find 10 less than a two-digit number. (1.NS.5) ● I can create number patterns using addition within 100. (1.CA.7) ● I can extend number patterns using addition within 100. (1.CA.7) ● I can state appropriate rules for number patterns using addition within 100. (1.CA.7)	**Assessment Vocabulary** ● Addend ● Addition ● Compose ● Number Pattern ● Ones ● Place-Value ● Sum ● Tens

Mathematical Processes ● *PS.4 Model with mathematics.* Explain which quantities are important in a problem and use a variety of tools and representations to show their relationship. ● *PS.8 Look for and express regularity in repeated reasoning.* ○ Apply previously used strategies to solve new problems.		
Resources		
Textbook **Lesson 17 Understand Tens** **Lesson 18 The 120 Chart** **Leeson 19 Understand 10 More and 10 Less** **Lesson 20A Add and Subtract Tens** **Lesson 20B Number Patterns**	**Digital** IDOE Examples/Tasks 1.CA.5 IDOE Examples/Tasks 1.NS.5 IDOE Examples/Tasks 1.CA.7 iReady/Adding Tens to Two Digit Numbers 1.NS.5	**Manipulatives** Rekenrek 100 Interactive 120's Chart Base Ten Blocks Ten Frame Place-Value Discs

<table>
<tr><td colspan="2"><u>General Description of the Unit</u>
Students will distinguish attributes of two- and three- dimensional shapes. They will be able to identify/distinguish between defining (e.g. squares are closed and have 4 equal sides) and non-defining (colors and sizes of the shapes) attributes.</td></tr>
<tr><td><u>Priority Standards</u>
1.G.2: Distinguish between defining attributes of two- and three-dimensional shapes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size). Create and draw two-dimensional shapes with defining attributes.</td><td><u>Supporting Standards</u>
1.G.1: Identify objects as two-dimensional or three-dimensional. Classify and sort two-dimensional and three-dimensional objects by shape, size, roundness and other attributes. Describe how two-dimensional shapes make up the faces of three-dimensional objects.
1.G.3: Use two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. [In grade 1, students do not need to learn formal names such as "right rectangular prism."]</td></tr>
<tr><td><u>Proficiency Scales</u>
<u>1.G.2</u></td><td><u>Tiered Assessments</u></td></tr>
<tr><td><u>Enduring Understandings</u>
Defining attributes are attributes that must always be present.</td><td><u>Essential Questions</u>
How to determine which attributes of shapes are defining compared to those that are non-defining?</td></tr>
</table>

● Non-defining attributes are attributes that do not always have to be present. ● Solid figures can be combined to make other shapes. ● Shapes can be closed and open.	● What can you find in our class that has defined attributes? ● How can you classify these shapes? ● How can shapes and solids be described, compared and used to make other shapes? ● Describe a shape using the no. of sides and corners ● Create two triangles using different shapes, sizes or positions. ● How can you sort shapes by just looking at their features?

Key Concepts	**Related Concepts**	**Assessment Vocabulary**
● I can describe what makes a two and three-dimensional shape. (1.G.2) ● I can create and draw two-dimensional shapes. (1.G.2)	● I can identify objects as two- or three-dimensional. (1.G.1) ● I can classify and sort two- and three-dimensional objects by shape, size, roundness, and other attributes. (1.G.1) ● I can describe how two-dimensional shapes make up the faces of three-dimensional objects. (1.G.1) ● I can combine three-dimensional shapes to create new, composite shapes. (1.G.3) ● I can compose new shapes from composite shapes. (1.G.3)	● Circle ● Compose ● Composite ● Cone ● Cube ● Cylinder ● Edge ● Faces ● Pyramid ● Rectangle ● Rectangular prism ● Sphere ● Square ● Three-Dimensional ● Trapezoid ● Triangle ● Two-Dimensional

		• Vertex

Mathematical Processes

- *PS.7 Look for and make use of structure.*
  - Identify patterns or structure in situations.
  - Change perspective and see things as single objects or as composed of several objects.

Resources

Textbook	Digital	Manipulatives
Lesson 26A Understand Shapes **Lesson 26B Two-and Three-Dimensional Objects** **Lesson 27 Understand Putting Shapes Together**	IDOE Examples/Tasks 1.G.1 IDOE Examples/Tasks 1.G.2 IDOE Examples/Tasks 1.G.3 iReady/Defining Attributes of Shapes 1.G.2 iReady/Making NewShapes1.G.2 iReady/Making New Shapes 1.G.3	Pattern Blocks Pattern Blocks Version 2 Geoboard Tangrams Shape Counters Geometric Solids Interactive Prisms Interactive Triangular/ Rectangular Pyramids Interactive Cylinder Interactive Cone Interactive Spheres Geogebra

<table>
<tr><td colspan="2"><u>General Description of the Unit</u>

Students will be able to divide circles and rectangles into two and four equal parts using the words: halves, fourths, and quarters. In addition, students will use the phrases half of, fourth of, and quarter of. Students will be able to describe the whole as two of or four of the parts.</td></tr>
<tr><td><u>Priority Standards</u>
1.G.4: Partition circles and rectangles into two and four equal parts; describe the parts using the words halves, fourths, and quarters; and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of, the parts. Understand for partitioning circles and rectangles into two and four equal parts that decomposing into equal parts creates smaller parts.</td><td><u>Supporting Standards</u>
N/A</td></tr>
<tr><td><u>Proficiency Scales</u>
<u>1.G.4</u></td><td><u>Tiered Assessments</u></td></tr>
<tr><td><u>Enduring Understandings</u>
A shape can be broken apart into equal-sized parts known as partitions.
When a shape is partitioned into four pieces, two of those pieces can be combined to form half of the original rectangle.</td><td><u>Essential Questions</u>
What does a circle look like when it has been partitioned into two pieces? Four pieces? How do these shapes differ? Can you partition these shapes in more than one way?</td></tr>
</table>

● When a shape is partitioned into two equal-sized pieces, those pieces are called halves. When a shape is partitioned into four equal-sized pieces, those pieces are called fourths or quarters.	● When a rectangle is partitioned, what do you notice about the shapes that are formed? ● How does partitioning circles relate to telling time on an analog clock?

Key Concepts	**Related Concepts**	**Assessment Vocabulary**
● I can break circles into two and four equal pieces. (1.G.4) ● I can break rectangles into two and four equal pieces. (1.G.4) ● I can describe equal pieces of circles and rectangles using the words halves, fourths, and quarters. (1.G.4) ● I can describe a whole circle or rectangle as having all the parts that make up that shape. (1.G.4) ● I can understand that decomposing circles and rectangles creates smaller parts. (1.G.4)	● **N/A**	● Decompose ● Equal parts ● Fourth ● Fraction ● Half ● Partition ● Quarter ● Rectangle

Mathematical Processes

- *PS.2 Reason abstractly and quantitatively.*
  - Make sense of quantities and their relationships in problem situations.
- *PS.4 Model with mathematics.*
  - Express quantitative/technical information in words and as a visual representation.

Resources

Textbook	Digital	Manipulatives
Lesson 28 Understand Breaking Shapes into Parts	IDOE Examples/Tasks 1.G.4 iReady/Making Equal Shares 1.G.4 iReady/Fill a Rectangle with Squares 1.G.4	Fraction Circles Circle and Rectangle Partitions

Unit 10- **Time**

General Description of the Unit

Students will be able to read time on a digital clock. Students will be able to use analog clocks to identify and write time to the nearest half-hour. Students will be able to relate time to events using words such as before/after, shorter/longer.

Priority Standards ● 1.M.2: Tell and write time to the nearest half-hour and relate time to events (before/after, shorter/longer) using analog clocks. Understand how to read hours and minutes using digital clocks.	**Supporting Standards** ● N/A
Proficiency Scales 1.M.2	**Tiered Assessments**
Enduring Understandings ● Time can be read and recorded on an analog clock and a digital clock. ● On an analog clock, the long hand, known as the minute hand, tells the minute, while the short hand, known as the hour hand, tells the hour. ● On an analog clock, when the minute hand points to the 6, that means it is 30 minutes past the hour.	**Essential Questions** ● If you were going to teach someone how to tell time, what would you say to them? ● When might using an analog clock be better than a digital clock? ● Why would you choose to use a digital clock instead of an analog clock? ● How can you partition an analog clock to help tell time? ● How many real-world examples can you come up with where knowing how to tell time can be important?

Key Concepts	**Related Concepts**	**Assessment Vocabulary**
	● **N/A**	● Analog Clock ● Digital Clock

• I can tell time to the nearest half-hour using an analog clock. (1.M.2) • I can write time to the nearest half-hour using an analog clock. (1.M.2) • I can understand how to read hours and minutes on digital clocks. (1.M.2)		• Hour hand • Minute hand • Time

Mathematical Processes

- *PS.6 Attend to precision.*
  - Communicate precisely to others.

Resources

Textbook	Digital	Manipulatives
Lesson 34 Tell Time	IDOE Examples/Tasks 1.M.2 **iReady Lesson - Telling Time**	Analog Clock Two-Clocks

Unit 11- **Money**

General Description of the Unit Students will be able to determine the value of a given coin amount when coins are limited to dimes, nickels, and pennies.	
Priority Standards ● 1.M.3: Find the value of a collection of pennies, nickels, and dimes.	**Supporting Standards** ● N/A
Proficiency Scales **1.M.3**	**Tiered Assessments**
Enduring Understandings ● The United States uses money that includes coins such as the penny, nickel, and dime. This money can be used to buy things. Other countries have different kinds of money. ● Coins look different and have different values.	**Essential Questions** ● How are pennies, nickels, and dimes alike? How are they different? ● Why is it important to be able to find the value of a collection of coins? ● How do you find the value of a collection of coins?

• Patterns in counting by tens, fives, and ones can be used to help count dimes, nickels, and pennies. It is easiest to count coins by descending value.	• If you have 94 cents, is that a lot of money? Why or why not?

Key Concepts	**Related Concepts**	**Assessment Vocabulary**
• I can find the value of groups of coins that include pennies, nickels, and dimes. (1.M.3)	• **N/A**	• Cents • Coin • Dime • Nickel • Penny • Value

Mathematical Processes

- *PS.6 Attend to precision*
  - Identify and use symbols and vocabulary appropriately.
  - Identify the appropriate mathematical language in another student's explanation of a problem.

Resources

Textbook	**Digital**	**Manipulatives**
	IDOE Examples/Tasks 1.M.3	Digital Coins- Heads and Tails Digital Coins

Lesson 35 Money	**iReady Tool for Instruction - Combining Coins**	

Unit 12- **Measurement**

General Description of the Unit Students will be able to place length, area, capacity, weight, and/or temperature in numerical order. Students will be able to compare two measurements (10 in is greater than 5 inches).	
Priority Standards ● 1.M.1: Use direct comparison or a nonstandard unit to compare and order objects according to length, area, capacity, weight, and temperature.	**Supporting Standards** ● N/A
Proficiency Scales **1.M.1**	**Tiered Assessments**
Enduring Understandings ● Length, area, capacity, weight, and temperature are all different measurements.	**Essential Questions**

● Objects can be measured and described using standard, nonstandard, and comparative measurements. ● Estimation and precision can both be used in measurement, and each has their own purpose.	● What are different ways you can describe the size of something? What are tools that can be used for those measurements? ● How would you describe the size of this pumpkin (or other classroom object) to someone who couldn't see it? How could we measure it to make our description even better? ● How could you describe a school bus to someone who couldn't see it? ● What are all the ways you could use to describe the difference between a hot dog and hamburger? Which of those are mathematical descriptions? ● When do you need to measure things at home? How do you measure them?

Key Concepts	**Related Concepts**	**Assessment Vocabulary**
● I can compare and order objects by length. (1.M.1) ● I can compare and order objects by area. (1.M.1) ● I can compare and order objects by capacity. (1.M.1) ● I can compare and order objects by weight. (1.M.1) ● I can compare and order objects by temperature. (1.M.1)	● **N/A**	● Area ● Capacity ● Compare ● Length ● Temperature ● Weight

Mathematical Processes

- *PS.5 Use tools appropriately.*
  - Consider a variety of tools necessary to solve a specific math problem.
- *PS.6 Attend to precision.*
  - Accurately determine the unit of measure of a given problem.

Resources

Textbook	Digital	Manipulatives
Lesson 31 Order Objects by Length **Lesson 32 Compare Lengths** **Lesson 33A Understand Length Measurement** **Lesson 33B Compare and Order Measurements**	IDOE Examples/Tasks 1.M.1 **iReady Tool for Instruction- Measuring Length** **iReady Tool for Instruction - Compare Lengths** **iReady Tool for Instruction - Order by Length**	Unifix Cubes

Unit 13- **Data Analysis**

General Description of the Unit Students will be able to graph and identify three choices on a given graph. Students will be able to identify the total number of data points (three). Students will be able to compare the total number of data points to one another (there are two more bananas than apples).	
Priority Standards ● 1.DA.1: Organize and interpret data with up to three choices (What is your favorite fruit? apples, bananas, oranges); ask and answer questions about the total number of data points, how many in each choice, and how many more or less in one choice compared to another.	**Supporting Standards** ● N/A
Proficiency Scales **1.DA.1**	**Tiered Assessments**
Enduring Understandings ● Many questions can be answered by analyzing and interpreting data. ● The type of data collected determines which way is best to visually represent that data.	**Essential Questions** ● What is a question you want to answer by collecting data? ● How can you organize your data?

● By representing data using graphics, it makes interpreting that data easier.	● How can representing data in different ways make interpreting that data simpler? Why are different representations easier to interpret than others?

Key Concepts	**Related Concepts**	**Assessment Vocabulary**
● I can organize data with up to three choices. (1.DA.1) ● I can interpret data with up to three choices. (1.DA.1) ● I can ask questions about data points. (1.DA.1) ● I can answer questions about data points. (1.DA.1)	● **N/A**	● Data ● Graph

Mathematical Processes

- *PS.1 Make sense of problems and persevere in solving them.*
    - Explain the meaning of a given problem by analyzing explicit evidence.

- *PS.7 Look for and make use of structure.*
    - Use what I already know about math to solve new problems.

Resources		
Textbook **Lesson 29 Sort and Count** **Lesson 30 Compare Data**	**Digital** IDOE Examples/Tasks 1.DA.1 iReady/Sorting in 2 Ways 1.DA.1 iReady/Representing Data: Tally Charts 1.DA.1	**Manipulatives** Two-Color Counters Color Bar Graphs