Grade 1 Mathematics
North Gibson School Corporation
SY 2022-2023

Grade 1 Mathematics

Units of Study			
Unit 1:	Ways to Add and Subtract to 10	29 days	1st quarter
Unit 2:	Add and Subtract to 10	21 days	1st-2nd quarter
Unit 3:	Add and Subtract to 20	25 days	2nd quarter
Unit 4A:	Counting and Place-Value	9 days	2nd quarter
Unit 4B:	Place-Value Computation	16 days	3rd quarter
Unit 5A:	Two-Digit Addition and Comparison	19 days	3rd quarter
Unit 5B:	Money and Regrouping Tens	11 days	3rd-4th quarter
Unit 6A:	Geometry	9 days	4th quarter
Unit 6B:	Fractions	6 days	4th quarter
Unit 7A:	Data and Time	18 days	4th quarter
Unit 7B:	Measurement	14 days	4th quarter

Appendices

Appendix A: Proficiency Scale Template

Appendix B: Curriculum Refinement Form

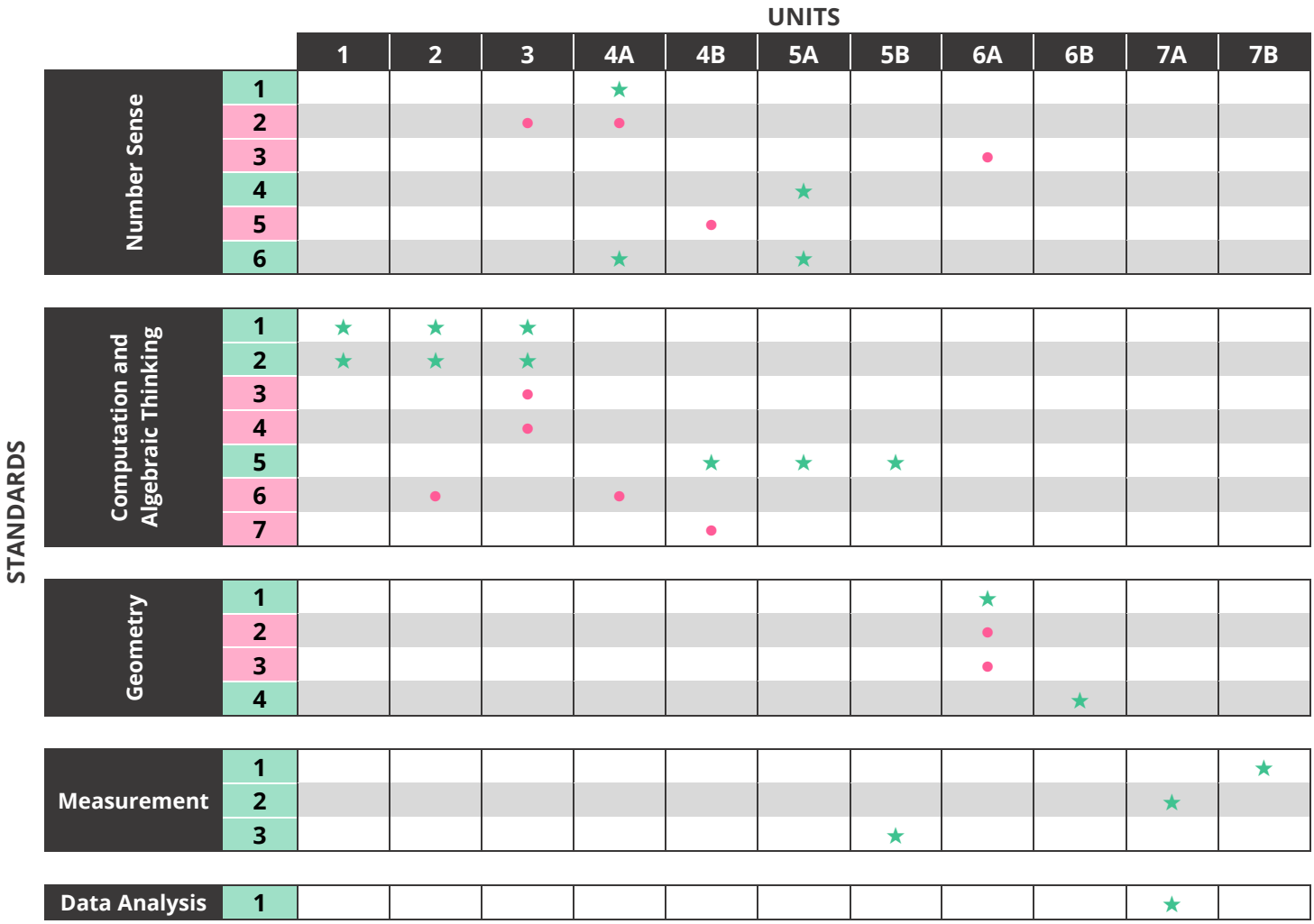
Appendix C: K-12 Math Priority Standards Vertical Articulation

Grade 1 Priority Standards

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 10 (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.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.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.
	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.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.
	1.M.1	Use direct comparison or a nonstandard unit to compare and order objects according to length, area, capacity, weight, and temperature.
	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.
	1.M.3	Identify the value of a penny, nickel, dime and a collection of pennies, nickels, and dimes.
	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.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.

Standards Breakdown

★: Priority Standards ●: Supporting Standards



Spiral Standards			
1st Quarter	**2nd Quarter**	**3rd Quarter**	**4th Quarter**
• Counting (1's & 10's) • Place-Value • Pennies • 2-D Shapes	• Counting (1s & 10's from any given number) • Place-Value • Pennies, Dimes • Add/Sub Word Problems • 3-D Shapes	• Counting (1s, 10's, 5s from any given number) • Pennies, Dimes, Nickels • Add/Sub Word Problems • Clocks • Ordinal Numbers	• Counting (1s, 10's, 5s from any given number • Pennies, Dimes, Nickels • Add/Sub Word Problems • Clocks

General Description of the Unit

In this unit students will continue to learn strategies for adding and subtracting within 10 and making connections between addition and subtraction. The focus of this unit is on the specific strategies that can help students become fluent with addition and subtraction facts such as Doubles and Doubles plus 1. In kindergarten, students learned to add and subtract within 10.

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 10 (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

N/A

Enduring Understandings

- Computational fluency refers to having efficiency, accuracy, and flexibility with computational strategies.
- There are many mental strategies that make adding numbers easier, such as making a ten and finding known sums.
- There are many mental strategies that make subtracting numbers easier, such as decomposing to ten, and using the relationship between addition and subtraction.
- Adding and subtracting zero does not affect the existing amount in addition and subtraction.

Essential Questions

- What is your favorite strategy to add numbers? Why?
- What is your favorite strategy to subtract numbers? Why?
- How are addition and subtraction alike? How are they different? Do you think adding or subtracting numbers is easier? Why?

Key Concepts

- I can fluently add within 10 by counting on. (1.CA.1)
- I can fluently add within 10 by making a group of ten. (1.CA.1)
- I can fluently add within 10 using the relationship between addition and subtraction. (1.CA.1)
- I can fluently add within 10 by creating easier, known sums. (1.CA.1)
- I can fluently subtract within 10 by counting back. (1.CA.1)
- I can fluently subtract within 10 by decomposing a number leading to a ten. (1.CA.1)
- I can fluently subtract within 10 by using the relationship between addition and subtraction. (1.CA.1)

Related Concepts

N/A

Vocabulary

- Addend
- Addition
- Decompose
- Difference
- Subtraction
- Sum

Mathematical Processes

- PS.1 Make sense of problems and persevere in solving them.
- PS.6 Attend to precision.

Resources

Proficiency Scales

- 1.CA.1
- 1.CA.2

Digital

- IDOE Examples/Tasks 1.CA.1
- IDOE Examples/Tasks 1.CA.2

Manipulatives

- Bear Counters
- Dice
- Marble Jar
- Number Line Version 2
- Rekenrek
- Ten Frame
- Ten Frame Version 2
- Two Color Counters
- Unifix Cubes

School Resources

Textbook

Textbook Name: Ready Math, Second Edition:

Notes:
Start Lessons on the first Monday of school.

Lessons:

Lesson 0: Lessons for the First Five Days
(3 days- Optional)
Lesson 1: Understand Number Partners for 10 (4 days)
Lesson 2: Doubles and Doubles Plus 1 (5 days)
Lesson 3: Count On to Add (5 days)
Lesson 4: Count On to Subtract (5 days)
Lesson 5: Missing Addends (5 days)

Formative Assessments

1 Day Review

Unit 1 Assessment

Unit 2: Add and Subtract to 10 (21 days, 1st quarter- 2nd quarter)

General Description of the Unit

In this unit students will apply the strategies they have learned to add and subtract within 10 when solving real-world problems. Students will understand true and false equations and learn the meaning of the equal sign. In kindergarten students learned to solve simple real-world problems involving addition and subtraction within 10.

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 10 (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.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).

Enduring Understandings

- Addition and subtraction are inverse operations.
- Addition involves adding to and putting together and is used in many real-world situations.
- Subtraction is used in situations of taking from, taking apart, and comparing and is used in many real-world situations.
- Equations can be written in different orders and with unknowns in different parts.
- The equal sign means that the values/equations on both sides of it are equivalent.

Essential Questions

- How do you know when you need to add or subtract with a word problem? Can you give an example of when you would need to add and when you would need to subtract?
- Does it matter which order you add numbers in; why or why not?
- Does it matter which order you subtract numbers in; why or why not?
- 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?

Key Concepts

- I can fluently add within 10 by counting on. (1.CA.1)
- I can fluently add within 10 by making a group of ten. (1.CA.1)
- I can fluently add within 10 using the relationship between addition and subtraction. (1.CA.1)
- I can fluently add within 10 by creating easier, known sums. (1.CA.1)
- I can fluently subtract within 10 by counting back. (1.CA.1)
- I can fluently subtract within 10 by decomposing a number leading to a ten. (1.CA.1)
- I can fluently subtract within 10 by using the relationship between addition and subtraction. (1.CA.1)
- I can demonstrate the role of 0 in addition and subtraction. (1.CA.1)

Related Concepts

- 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)

Vocabulary

- Addend
- Addition
- Decompose
- Difference
- Equal sign
- Subtraction
- Sum

• I can solve real-world problems involving addition within 10. (1.CA.2) • I can solve real-world problems involving subtraction within 10. (1.CA.2) • I can use objects, drawings, and equations to solve real-world addition and subtraction problems within 10. (1.CA.2)		

Mathematical Processes

- PS.1 Make sense of problems and persevere in solving them.
- PS.6 Attend to precision.

Resources

Proficiency Scales	Digital	Manipulatives
• 1.CA.1 • 1.CA.2	• IDOE Examples/Tasks 1.CA.1 • IDOE Examples/Tasks 1.CA.2 • IDOE Examples/Tasks 1.CA.6	• Bear Counters • Dice • Marble Jar • Math Balance • Number Line Version 2 • Pan Balance • Rekenrek • Ten Frame • Ten Frame Version 2 • Two Color Counters • Unifix Cubes

School Resources

Textbook	Formative Assessments
Lessons: Lesson 6: Add and Subtract in Word Problems (5 days) Lesson 7: Subtract to Compare in Word Problems (5 days) Lesson 8: Facts I Know (5 days) Lesson 9: Understand True and False Equations (4 days)	1 Day Review Unit 2 Assessment

General Description of the Unit

In this unit students will add and subtract within 20. Students will learn to make groups of ten to add and subtract fluently. They will continue to practice strategies they learned in previous units to add and subtract and apply those strategies when solving real-world problems within 20.

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 10 (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.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.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).

Enduring Understandings

- When adding more than two numbers, add the two numbers that are most compatible first.
- Teen numbers are composed of one ten and some ones and the digits in teen numbers represent the one ten and number of ones.

Essential Questions

- When have you needed to use addition at home? Can you think of a word problem that you would need to add to solve?
- When have you needed to use subtraction at home? Can you think of a word problem that you would need to subtract to solve?
- Does it matter which order you add numbers in; why or why not?
- How are the numbers 7 and 17 alike? How are they different?

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 between addition and subtraction. (1.CA.1)

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 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 that 10 ones make a group called a “ten”. (1.NS.2)

Vocabulary

- Addend
- Addition
- Compose
- Decompose
- Difference
- Equation
- Ones
- Subtraction
- Sum
- Symbol
- Tens

• 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 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)	

Mathematical Processes

- PS.7 Look for and make use of structure.
- PS.8 Look for and express regularity in repeated reasoning.

Resources

Proficiency Scales	Digital	Manipulatives
• 1.CA.1 • 1.CA.2	• 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.NS.2	• Base Ten Blocks • Base Ten Blocks Version 2 • Bear Counters • Dice • Marble Jar • Number Line Version 2 • Place-Value Discs • Place-Value Mat • Rekenrek • Ten Frame • Ten Frame Version 2 • Two Color Counters • Unifix Cubes

School Resources	
Textbook Lessons: Lesson 10: Understand Teen Numbers (4 days) Lesson 11: Understand Sums Greater than 10 (4 days) Lesson 12: Make a Ten to Add (5 days) Lesson 13: Add Three Numbers (5 days) Lesson 14: Make a Ten to Subtract (5 days)	**Formative Assessments** 1 Day Review Unit 3 Assessment

General Description of the Unit

In this unit students will count to 120 by ones, fives, and tens from any given number, and learn to read, write, and represent numbers to 120. Students will build their understanding of place value by showing equivalent forms of tens and ones. In kindergarten, students learned to count to 100 by ones and tens and to represent numbers 10-20 as tens and ones.

Priority 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.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.

Supporting Standards

- **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).
- **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).

Enduring Understandings

- There are number patterns when counting by ones, fives, and tens.
- Numbers can be represented in many different ways, including with numerals, words, and objects.
- Two-digit numbers are created using groups of tens and ones and can be constructed in multiple ways.
- The first digit in a two-digit number represents the number of tens and the second digit represents the number of ones.

Essential Questions

- What patterns do you notice when you count by tens? By fives? By ones? How can those patterns help you while counting?
- What are all the ways you can think of to represent the number 93? What is an example of 93 when it is a small amount of something? What is an example of 93 when it is a big amount of something?
- Where do you see numbers in our school? At home? In your neighborhood?
- How are the numbers 27 and 72 alike? How are they different?
- How could you represent the number 45 using only ones? How many different ways could you represent the number 45 using tens and ones?

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 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)

Related Concepts

- 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)
- 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)

Vocabulary

- Addition
- Compose
- Count on
- Equal sign
- Ones
- Subtraction
- Tens

Mathematical Processes

- PS.2 Reason abstractly and quantitatively.
- PS.4 Model with mathematics.

Resources		
Proficiency Scales • 1.NS.1 • 1.NS.6	**Digital** • IDOE Examples/Tasks 1.NS.1 • IDOE Examples/Tasks 1.NS.6 • IDOE Examples/Tasks 1.CA.6 • IDOE Examples/Tasks 1.NS.2	**Manipulatives** • Base Ten Blocks • Base Ten Blocks Version 2 • Interactive 120s Chart • Math Balance • Pan Balance • Place-Value Discs • Place-Value Mat • Ten Frame • Ten Frame Version 2

School Resources	
Textbook Notes: Students are counting and practicing tens and ones every day (per spiral practice chart) to prepare for this unit Lessons: Lesson 15: Understand Tens (4 days) Lesson 16: Counting to 120 (5 days)	**Formative Assessments** N/A

General Description of the Unit

In this unit students will learn to mentally add ten more and ten less, moving from concrete to abstract understanding. Students will learn to add ten to any number mentally using place value understanding and will explore other addition number patterns. In kindergarten, students learned to add and subtract within ten and decompose numbers less than 10 into pairs.

Priority 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.

Supporting Standards

- **1.CA.7:** Create, extend, and give an appropriate rule for number patterns using addition within 100.
- **1.NS.5:** Find mentally ten more or ten less than a given two-digit number without having to count, and explain the thinking process used to get the answer.

Enduring Understandings

- Addition and subtraction, looking at tens and one values, and number sense can be used to find patterns between numbers within 100.
- Mentally adding or subtracting ten can be done by using number sense understanding of the digit in the tens-place of a number.

Essential Questions

- How is adding two-digit numbers similar to adding smaller numbers? How is it different?
- Why is place-value important when adding numbers? How can it help you?
- How do you figure out a number pattern? Can there be more than one right answer?
- How can you add/subtract ten from a number without counting? Why does your strategy work?

Key Concepts

- I can add a two-digit number and a multiple of 10. (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)

Vocabulary

- Addend
- Addition
- Compose
- Number pattern
- Place value
- Sum

Mathematical Processes

- PS.3 Construct convincing arguments and critique the reasoning of others.
- PS.8 Look for and express regularity in repeated reasoning.

Resources

Proficiency Scales

- 1.CA.5

Digital

- IDOE Examples/Tasks 1.CA.5
- IDOE Examples/Tasks 1.CA.7

Manipulatives

- Base Ten Blocks
- Base Ten Blocks Version 2
- Interactive 120s Chart
- Place-Value Discs
- Place-Value Mat

School Resources	
Textbook Notes: Goal to move from concrete to abstract with 10 more 10 less Lessons: Lesson 17: Understand 10 More and 10 Less (4 days) Lesson 18: Add Tens to Any Number (5 days) Lesson 19: Addition Number Patterns (5 days)	**Formative Assessments** 1 Day Review Unit 4 Assessment

General Description of the Unit

In this unit students learn ways to make numbers. Students will understand that when adding two-digit numbers it is sometimes necessary to compose a ten. Students will then learn to compare two-digit numbers using comparison symbols. Last, students will learn to add a two-digit number with a one-digit number and to add a two-digit number with a multiple of ten.

Priority 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.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.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.

Supporting Standards

N/A

Enduring Understandings

- When adding two-digit numbers, all of the tens and all of the ones are combined.
- When adding larger numbers, it is sometimes necessary to compose a new ten, depending on how many ones you have.
- Numbers can be compared using number sense understanding of tens and ones. Symbols like <, >, and = are used to show comparisons of numbers.
- Two-digit numbers are created using groups of tens and ones and can be constructed in multiple ways.
- The first digit in a two-digit number represents the number of tens and the second digit represents the number of ones.

Essential Questions

- How is adding two-digit numbers similar to adding smaller numbers? How is it different?
- Why is place-value important when adding numbers? How can it help you?
- What examples can you think of when you would need to add larger numbers?
- How can you quickly compare the value of two numbers? What is the most important digit when comparing numbers; why?

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

N/A

Vocabulary

- Addend
- Addition
- Compose
- Equal
- Greater than
- Less than
- Ones
- Place value
- Sum
- Tens

• 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 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.4 Model with mathematics.
- PS.7 Look for and make use of structure.

Resources

Proficiency Scales	Digital	Manipulatives
• 1.CA.5 • 1.NS.4- template • 1.NS.6	• IDOE Examples/Tasks 1.CA.5 • IDOE Examples/Tasks 1.NS.4 • IDOE Examples/Tasks 1.NS.6	• Base Ten Blocks • Base Ten Blocks Version 2 • Interactive 120s Chart • Place-Value Discs • Place-Value Mat • Ten Frame • Ten Frame Version 2

School Resources

Textbook	Formative Assessments
Notes: Supplement Lesson 22 Lessons: Lesson 20: Understand Ways to Make Numbers (4 days) Lesson 21: Compare Numbers (5 days) Lesson 22: Add Tens and Add Ones (10 days)	N/A

General Description of the Unit
In this unit students will learn to identify the value of individual and a collection of coins including pennies, nickels, and dimes. Students will also learn to add where composing a ten is necessary.

Priority Standards
- **1.M.3:** Identify the value of a penny, nickel, dime and a collection of pennies, nickels, and dimes.
- **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.

Supporting Standards
N/A

Enduring Understandings
- The United States uses money that includes coins such as the penny, nickel, and dime. People work to earn money, and this money can be used to buy things.
- Coins look different and have different values.
- 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.

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?

Key Concepts
- I can make a new group of ten when there are more than 10 ones. (1.CA.5)
- I can identify the value of a penny. (1.M.3)
- I can identify the value of a nickel. (1.M.3)
- I can identify the value of a dime. (1.M.3)
- I can find the value of groups of coins that include pennies, nickels, and dimes. (1.M.3)

Related Concepts
N/A

Vocabulary
- Addend
- Addition
- Collection
- Compose
- Dime
- Nickel
- Penny
- Place value
- Sum
- Value

Mathematical Processes
- PS.1 Make sense of problems and persevere in solving them.
- PS.6 Attend to precision.

Resources

Proficiency Scales
- 1.CA.5
- 1.M.3

Digital
- IDOE Examples/Tasks 1.CA.5
- IDOE Examples/Tasks 1.M.3

Manipulatives
- Base Ten Blocks
- Base Ten Blocks Version 2
- Digital Coins Version 2
- Digital Coins- Heads and Tails
- Interactive 120s Chart
- Place-Value Discs
- Place-Value Mat

School Resources	
Textbook Lessons: Lesson 23: Money (4 days) Lesson 24: Add and Regroup (5 days)	**Formative Assessments** 1 Day Review Unit 5 Assessment

General Description of the Unit

In this unit students will identify, classify, and sort two- and three-dimensional objects by their attributes. Students will describe how two-dimensional shapes make up the faces of three-dimensional shapes and will use shapes to create a composite shape. Students will also formally learn ordinal numbers with an ordered set up to ten items. In kindergarten, students learned to compare, describe, and compose simple shapes.

Priority Standards

- **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.

Supporting Standards

- **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.
- **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."]
- **1.NS.3:** Match the ordinal numbers first, second, third, etc., with an ordered set up to 10 items.

Enduring Understandings

- Two-dimensional objects have length and width, and three-dimensional objects have length, width, and height.
- Two- and three-dimensional objects can be described, classified, and sorted by their shape, size, roundness, and other attributes.
- Two-dimensional shapes make up the faces of three-dimensional objects.
- Two- and three-dimensional shapes have defining (i.e. open or closed, number of sides, number of corners, etc.) and non-defining attributes (i.e. color, orientation, overall size, etc.)
- Complex shapes can be made by combining two-dimensional and three-dimensional shapes. The composite shapes do not retain all of the attributes of the individual shapes.
- When objects are placed in an order, ordinal numbers are used to designate which position something is in.

Essential Questions

- How are two-dimensional and three-dimensional shapes alike? How are they different?
- What are real-world examples of triangles, squares, rectangles, and circles?
- What are real-world examples of spheres, cubes, rectangular prisms, cones, cylinders, and pyramids?
- How could you describe a (triangle, square, rectangle, circle, sphere, cube, rectangular prism, cone, cylinder, and/or pyramid) in enough detail that someone who couldn't see the shape could draw it?
- How many ways can you make a rectangle from smaller shapes? How is it like the original shapes? How is it different?
- When have you used ordinal numbers in your life? Why are they helpful?

Key Concepts

- 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)

Related Concepts

- 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 combine two-dimensional shapes to create new, composite shapes. (1.G.3)
- 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)

Vocabulary

- Compose
- Composite
- Faces
- Ordinal
- Three-dimensional
- Two-dimensional

	• I can match numbers with their ordinals in a set with up to 10 items. (1.NS.3)	

Mathematical Processes
- PS.2 Reason abstractly and quantitatively.
- PS.8 Look for and express regularity in repeated reasoning.

Resources

Proficiency Scales	Digital	Manipulatives
• 1.G.1	• IDOE Examples/Tasks 1.G.1 • IDOE Examples/Tasks 1.G.2 • IDOE Examples/Tasks 1.G.3 • IDOE Examples/Tasks 1.NS.3	• Bear Counters • Geoboards • Geometric Solids • Interactive Cone • Interactive Cylinder • Interactive Prisms • Interactive Spheres • Interactive Triangular/ Rectangular Pyramids • Pattern Blocks • Pattern Blocks Version 2 • Shape Counters • Tangrams • Unifix Cubes

School Resources

Textbook	Formative Assessments
Notes: Condensed Lessons 26-28, combine materials for the Lesson (Consider accelerating past the introductory Lesson- could use during math talks) Lessons: Lesson 26: Three- and Two-Dimensional Objects (3 days) Lesson 27: Understand Shapes (3 days) Lesson 28: Understand Putting Shapes Together (3 days)	N/A

General Description of the Unit
In this unit students will be introduced to fractions through partitioning of circles and rectangles into two and four equal parts. Students will learn to describe the parts using fraction vocabulary such as halves, fourths, and quarters.

Priority Standards
- **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.

Supporting Standards
N/A

Enduring Understandings
- A shape can be broken apart into equal-sized parts known as partitions.
- When a shape is partitioned into two equal-sized parts, those parts are called halves. It takes two halves to make a whole.
- When a shape is partitioned into four equal-sized parts, those parts are called fourths or quarters. It takes four fourths to make a whole.

Essential Questions
- What does a circle look like when it has been partioned into two pieces? Four pieces? How can you describe those partitions?
- What does a rectangle look like when it has been partitioned into two pieces? Four pieces? How can you describe those partitions?
- Can you partition shapes in more than one way?

Key Concepts
- 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)

Related Concepts
N/A

Vocabulary
- Decompose
- Equal parts
- Fourth
- Fraction
- Half
- Partition
- Quarter
- Rectangle

Mathematical Processes
- PS.2 Reason abstractly and quantitatively.
- PS.4 Model with mathematics.

Resources

Proficiency Scales
- 1.G.4

Digital
- IDOE Examples/Tasks 1.G.4

Manipulatives
- Circle and Rectangle Partitions
- Fraction Circles

School Resources	
Textbook Lessons: Lesson 29: Understand Breaking Shapes into Parts (4 days)	**Formative Assessments** 1 Day Review Unit 6 Assessment

General Description of the Unit

In this unit students will organize and interpret data with up to three choices and ask and answer questions about the data. Then students will learn to tell and write time to the nearest half hour and relate time to events. In kindergarten, students learned the concept of time such as morning and afternoon and that clocks and calendars are tools that measure time.

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.
- **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

Enduring Understandings

- Many questions can be answered by analyzing and interpreting data.
- Representing data with graphs helps to make interpreting data easier.
- There are multiple types of graphs that can be used to represent data, including bar and picture graphs.
- 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, or half past, the hour.
- The hour hand moves as the minute hand moves, and it does not always point directly at the number for the hour.

Essential Questions

- What types of questions can you think of that could be answered by collecting data?
- How can you organize different pieces of data that you have collected? Which is your favorite way, why?
- How would you describe how minute hands and hour hands work on a clock?
- How many real-world examples can you come up with where knowing how to tell time can be important?

Key Concepts

- 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)
- 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)

Related Concepts

N/A

Vocabulary

- Analog clock
- Data
- Digital clock

Mathematical Processes

- PS.3 Construct convincing arguments and critique the reasoning of others.
- PS.6 Attend to precision.

Resources		
Proficiency Scales • 1.DA.1 • 1.M.2	**Digital** • IDOE Examples/Tasks 1.DA.1 • IDOE Examples/Tasks 1.M.2	**Manipulatives** • Analog Clock • Clock Version 2 • Color Bar Graphs • Color In Graph • Pictographs • Two-Clocks

School Resources	
Textbook Lessons: Lesson 30: Sort and Count (4 days) Lesson 31: Compare Data (4 days) Lesson 35: Tell and Write Time (10 days)	**Formative Assessments** N/A

General Description of the Unit
In this unit students will explore measurement by learning to use nonstandard units to compare and order objects according to length, area, capacity, weight, and temperature.

Priority Standards	Supporting Standards
• **1.M.1:** Use direct comparison or a nonstandard unit to compare and order objects according to length, area, capacity, weight, and temperature.	N/A

Enduring Understandings	Essential Questions
• Length, area, capacity, weight, and temperature are all different types of measurements. • Objects can be measured and described using standard, non-standard, 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? • How would you describe the size of this watermelon (or other classroom object) to someone who couldn't see it? How could we measure it to make our description even better? • When do you need to measure things at home? How do you measure them?

Key Concepts	Related Concepts	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.4 Model with mathematics.
- PS.5 Use tools appropriately.

Resources

Proficiency Scales	Digital	Manipulatives
• 1.M.1	• IDOE Examples/Tasks 1.M.1	• Unifix Cubes

School Resources

Textbook	Formative Assessments
Notes: Combine Lesson 25 concepts with Lesson 34 if needed. Lessons: Lesson 32: Order Objects by Length (4 days) Lesson 33: Understand Length Measurement (4 days) Lesson 34: Compare and Order Measurements (4 days) Lesson 25: Ordinal Numbers	1 Day Review Unit 7 Assessment