

Grade 2 Mathematics North Gibson School Corporation SY 2022-2023

Grade 2 Mathematics

Units of Study							
Unit 1:	Numbers within 20	Ŀ	27 days	1st quarter			
Unit 2A:	Addition and Subtraction within 100	()	20 days	1st quarter			
Unit 2B:	Number Sense within 1,000		18 days	2nd quarter			
Unit 2C:	Addition and Subtraction within 1,000	I	25 days	2nd quarter			
Unit 3A:	Measurement- Length	I	23 days	3rd quarter			
<u>Unit 3B:</u>	Measurement - Time	I	15 days	3rd quarter			
Unit 3C:	Measurement- Money	I	15 days	3rd -4th quarter			
Unit 4A:	Geometry-Shapes	Ŀ	9 days	4th quarter			
Unit 4B:	Geometry- Arrays	L)	8 days	4th quarter			
Unit 4C:	Geometry-Fractions	3	4 days	4th quarter			
Unit 5:	Data	3	5 days	4th quarter			

Appendices

Appendix A: Proficiency Scale Template

Appendix B: Curriculum Refinement Form

Appendix C: K-12 Math Priority Standards Vertical Articulation

Grade 2 Priority Standards

	2.CA.1	Add and subtract fluently within 100.
Duiovitu	2.CA.2	Solve real-world problems involving addition and subtraction within 100 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 drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.
	2.CA.4	Add and subtract within 1000, 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 or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones, and that sometimes it is necessary to compose or decompose tens or hundreds.
	2.DA.1	Draw a picture graph (with single-unit scale) and a bar graph (with single-unit scale) to represent a data set with up to four choices (What is your favorite color? red, blue, yellow, green). Solve simple put-together, take-apart, and compare problems using information presented in the graphs.
	2.G.1	Identify, describe, and classify two- and three-dimensional shapes (triangle, square, rectangle, cube, right rectangular prism) according to the number and shape of faces and the number of sides and/or vertices. Draw two-dimensional shapes.
Standards	2.G.4	Partition a rectangle into rows and columns of same-size (unit) squares and count to find the total number of same-size squares.
	2.G.5	Partition circles and rectangles into two, three, or four equal parts; describe the shares using the words halves, thirds, half of, a third of, etc.; and describe the whole as two halves, three thirds, four fourths. Recognize that equal parts of identical wholes need not have the same shape.
	2.M.2	Estimate and measure the length of an object by selecting and using appropriate tools, such as rulers, yardsticks, meter sticks, and measuring tapes to the nearest inch, foot, yard, centimeter and meter.
	2.M.5	Tell and write time to the nearest five minutes from analog clocks, using a.m. and p.m. Solve real-world problems involving addition and subtraction of time intervals on the hour or half hour.
	2.M.7	Find the value of a collection of pennies, nickels, dimes, quarters and dollars.
	2.NS.2	Read and write whole numbers up to 1,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 1,000.
	2.NS.6	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones (e.g., 706 equals 7 hundreds, 0 tens, and 6 ones). Understand that 100 can be thought of as a group of ten tens - called a "hundred." Understand that the numbers 100, 200, 200, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

Standards Breakdown

/*: Priority Standards
/•: Supporting Standards

								UNITS					
			1	2A	2B	2C	3A	3B	3C	4A	4B	4C	5
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General Description of the Unit	General Description of the Unit						
In this unit students will begin the sch	ool year working w	ith numbers within 2	20. Students will be introduced to				
even and odd numbers, review strate	gies for mental add	lition and subtractio	n within 20, and solve one and two				
step word problems involving addition and subtraction within 20. In first grade, students developed fluency for							
addition and subtraction within 20.							
Priority Standards		Supporting Stand	ards				
 2.CA.1: Add and subtract fluently with 2.CA.2: Solve real-world problems in and subtraction within 100 in situation taking from, putting together, taking a comparing, with unknowns in all parts subtraction problem (e.g., by using drequations with a symbol for the unknown represent the problem). Use estimation whether answers are reasonable in a second second	hin 100. volving addition hs of adding to, part, and s of the addition or rawings and own number to on to decide ddition problems.	• 2.NS.5: Determine whether a group of objects (up to 20) has an odd or even number of members (e.g., by placing that number of objects in two groups of the same size and recognizing that for even numbers no object will be left over and for odd numbers one object will be left over, or by pairing objects or counting them by 2s).					
Enduring Understandings		Essential Questio	ns				
Computational fluency refers to havin	g efficiency,	How are addition	and subtraction similar? How are				
Addition involves adding to and nuttin	tional strategies.	• How are addition	and subtraction word problems alike?				
used in many real-world situations.	ig logether and is	How are they diff	erent? How do you figure out which				
 Subtraction is used in situations of tal 	king from, taking	operation to use	to solve the word problem?				
apart, and comparing and is used in r	many real-world		·				
situations.							
Key Concepts	Related Concepts	i	Vocabulary				
 I can add within 20. (2.CA.1) 	 I can determine if 	a group of	Addend				
• I can subtract within 20. (2.CA.1)	objects is odd or	even. (2.NS.5)	• Difference				
 I can solve real-world problems involving addition within 20 	 I can separate an objects up to 20 i 	even number of	• Divide				
	aroups (2 NS 5)	nio iwo equal	• Estimation				
 I can solve real-world problems 	 I can separate ar 	odd number of	• Odd				
involving subtraction within 20.	objects into two e	equal groups with	Pairing				
(2.CA.2)	one left over. (2.N	NS.5)	Remainder				
I can use estimation to decide	 I can place an ev objecto inte paire 	en number of	• Sum				
whether my sums are reasonable.		. (2.INS.3) d number of					
 I can use drawings and equations 	objects into pairs	with one left over.					
with a symbol for the unknown	(2.NS.5)						
number to represent the problem.	 I can count an ev 	en number of					
(2.CA.2)	objects by 2's. (2	.NS.5)					
	 I can count an od objects by 2's wit 	d number of					
	(2.NS.5)						
Mathematical Processes							
 PS 1 Make sense of problems an 	d persevere in solvi	ing them					
 PS.6 Attend to precision. 							
	Reso	urces					
Proficiency Scales	Digital		Maninulatives				
• 2 CA 1 - template		Tasks 2 CA 1	Base Ten Blocks				
• 2.CA.2	IDOE Examples	Tasks 2.CA 2	Base Ten Blocks Version 2				
<u></u>	IDOE Examples	Tasks 2.NS.5	Interactive 120s Chart				

- Place-Value Cards
- Place-Value Discs
- Place-Value Mat

School Resources							
Textbook	Formative Assessments						
Textbook Name: Ready Math, Second Edition: Note: Pacing is estimated to begin lesson 1 the first Monday of the school year. Lesson 0: Lessons for the First Five Days (3 days) Lesson 1: Even and Odd Numbers (5 days) Lesson 2: Understand Mental Math Strategies (Fact Families) (4 days) Lesson 3: Understand Mental Math Strategies (Make a Ten) (4 days) Lesson 4: Solve One-Step Word Problems (5 days) Lesson 5: Solve Two-Step Word Problems (5 days)	Lesson 1 Quiz Lesson 2 Quiz Lesson 3 Quiz Lesson 4 Quiz Lesson 5 Quiz (Note: Lesson quizzes included in the last day of pacing for a Lesson) Unit 1 Assessment						

General Description of the Unit In this unit students will build on their addition and subtraction understandings by extending from within 20 to within 100. Students will be composing and decomposing tens to add and subtract two-digit numbers. Students will be introduced to writing equations using a symbol for the unknown number. Students apply these skills to solve real world problems involving addition and subtraction within 100 in one step real world problems and use estimation to decide reasonableness of answers. **Priority Standards** Supporting Standards • 2.CA.1: Add and subtract fluently within 100. • N/A • 2.CA.2: Solve real-world problems involving addition and subtraction within 100 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 drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems. **Enduring Understandings** Essential Questions • It is sometimes necessary to compose a ten when • How would you teach someone to add two numbers adding two numbers together. together? What would be important for them to know? · How would you teach someone to subtract two • It is sometimes necessary to decompose a ten when subtracting two numbers. numbers? What would be important for them to know? • Estimation should be used to determine the What is an example of a real-world problem in which reasonableness of a sum. you would have to add two two-digit numbers? • What is an example of a real-world problem in which you would have to subtract two two-digit numbers? Vocabulary **Key Concepts Related Concepts** • I can add within 100. (2.CA.1) • N/A Addend • I can subtract within 100. (2.CA.1) • Difference • I can solve real-world problems Estimation involving addition within 100. • Sum (2.CA.2) • I can solve real-world problems involving subtraction within 100. (2.CA.2) • I can use estimation to decide whether my sums are reasonable. (2.CA.2) • I can use drawings and equations with a symbol for the unknown number to represent the problem. (2.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			
 <u>2.CA.1 - template</u> 	 IDOE Examples/Tasks 2.CA.1 	Base Ten Blocks			
• <u>2.CA.2</u>	 IDOE Examples/Tasks 2.CA.2 	 Base Ten Blocks Version 2 			
		 Interactive 120s Chart 			
		 Place-Value Cards 			
		 Place-Value Discs 			
		 Place-Value Mat 			

School Resources						
Textbook	Formative Assessments					
Lessons: Lesson 6: Add Two-Digit Numbers (5 days) Lesson 7: Subtract Two-Digit Numbers (5 days) Lesson 8: Add and Subtract Two-Digit Numbers (5 days) Lesson 9: Solve One-Step Word Problems with Two-Digit Numbers (5 days)	Lesson 6 Quiz Lesson 7 Quiz Lesson 8 Quiz Lesson 9 Quiz					

General Description of the Unit						
In this unit students will expand their number sense understanding into the hundreds place by reading, writing, modeling and comparing three-digit numbers. Students will build on their understanding of standard and word form and be introduced to expanded form. In first grade, students were reading, writing, and comparing two-digit						
numbers.						
 Priority Standards 2.NS.2: Read and write whole number Use words, models, standard form and to represent and show equivalent form numbers up to 1,000. 2.NS.6: Understand that the three dig number represent amounts of hundred (e.g., 706 equals 7 hundreds, 0 tens, Understand that 100 can be thought of ten tens - called a "hundred." Understand numbers 100, 200, 200, 400, 500, 60 refer to one, two, three, four, five, six, nine hundreds (and 0 tens and 0 one) 	ers up to 1,000. Ind expanded form ms of whole gits of a three-digit eds, tens, and ones and 6 ones). of as a group of tand that the 0, 700, 800, 900 , seven, eight, or s).	 Supporting Standards 2.NS.1: Count by ones, twos, fives, tens, and hundreds up to at least 1,000 from any given number. 2.NS.3: Plot and compare whole numbers up to 1,000 on a number line. 2.NS.7: Use place value understanding to compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. 				
Enduring Understandings		Essential Questio	ns			
 Numbers can be represented in many including in standard form, expanded and with models. Three-digit numbers are created usin hundreds, tens, and ones and can be multiple ways. There are number patterns when cou twos, fives, tens, and hundreds. Number lines can be used to represe numbers. Numbers can be compared using nur understanding of hundreds, tens, and like <, >, and = are used to show com numbers. 	y different ways, form, word form, g groups of e represented in inting by ones, nt and compare mber sense d ones. Symbols inparisons of	 What are all of the number 781? that 781 would be example of some amount? What would it be what would it be What patterns do hundreds? By ter How can those pa How can you quid numbers? What comparing number What is an example compare number 	e ways you can think of to represent What is an example of something a small amount of? What is an thing that 781 would be a large rould it be impossible to have 781 of? likely to have 781 of? you notice when you count by ns? By fives? By twos? By ones? atterns help you while counting? ckly compare the value of three is the most important digit when ers; why? ple of when you might need to s in your life?			
Key Concepts	Related Concepts		Vocabulary			
 I can read and write numbers to 1,000 in standard form. (2.NS.2) I can read and write numbers to 1,000 in word form. (2.NS.2) I can read and write numbers to 1,000 in expanded form. (2.NS.2) I can use models to represent numbers up to 1,000. (2.NS.2) I can show and represent equivalent numbers in in word, standard and expanded form and using models. (2.NS.2) I can understand that the digit in the hundreds place represents how many hundreds are in the number. (2.NS.6) I can understand that the digit in the tens place represents how many tens are in the number. (2.NS.6) I can understand that the digit in the ones place represents how many ones are in the number. (2.NS.6) 	 I can count on by number up to 1,0 I can count on by any number up to I can plot number number line. (2.N) I can use a numb numbers up to 1, I can use greater and equal to sign three digit number I can use place v understanding to three-digit number 	ones from any 00. (2.NS.1) twos from any 00. (2.NS.1) fives from any 00. (2.NS.1) tens from any 00. (2.NS.1) thundreds from 01,000. (2.NS.1) ts to 1,000 on a S.3) ther line to compare 000. (2.NS.3) than, less than, s to compare two, ers. (2.NS.7) alue compare two, ers. (2.NS.7)	 Compare Count on Equal Equivalent numbers Expanded form Greater than Hundreds Less than Number line Ones Place value Plot Standard form Tens Word form 			

 I can understand that the number 100 can be made by making ten groups of ten. (2.NS.6) I can understand that the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds. (2.NS.6) 			
 PS.7 Look for and make use of struct PS.8 Look for and express regularity 	ture.	ina	
Proficiency Scales	Digital		Manipulatives
• <u>2.NS.2</u> • <u>2.NS.6</u>	IDOE Examples IDOE Examples IDOE Examples IDOE Examples IDOE Examples IDOE Examples	/Tasks 2.NS.2 /Tasks 2.NS.6 /Tasks 2.NS.1 /Tasks 2.NS.3 /Tasks 2.NS.7	Base Ten Blocks Interactive 120s Chart Number Line Place-Value Cards Place-Value Discs Place-Value Mat
	School R	esources	
Textbook		Formative Assess	sments
Lessons: Lesson 10: Understand Three-Digit Nu Lesson 11: Read and Write Numbers (Lesson 12: Compare Numbers Using F days) Lesson 13: Plot and Compare Number	mbers (4 days) 4 days) Place Value (5 s (5 days)	Lesson 10 Quiz Lesson 11 Quiz Lesson 12 Quiz Lesson 13 Quiz	

General Description of the Unit						
In this unit students will build on their addition and subtraction understandings by extending from within 100 to within 1,000 using place value and modeling strategies. Students will add several two-digit numbers and will be						
Composing and decomposing tens an	id nundreds to add	and Subtract three-				
 2.CA.4: Add and subtract within 1000 drawings and strategies based on pla properties of operations, and/or the re between addition and subtraction; dea and explain the reasoning used. Under adding or subtracting three-digit number subtracts hundreds and hundreds, ter and ones, and that sometimes it is ne compose or decompose tens or hundred), using models or ace value, elationship scribe the strategy erstand that in bers, one adds or ns and tens, ones ecessary to lreds.	 Supporting Standards 2.CA.6: Show that the order in which two numbers are added (commutative property) and how the numbers are grouped in addition (associative property) will not change the sum. These properties can be used to show that numbers can be added in any order. 2.CA.7: Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000. 				
Enduring Understandings		Essential Questio	ns			
 When adding three-digit numbers, all all of the tens, and all of the ones are in their place-values. It is sometimes necessary to compose and/or a ten when adding two numbers when subtracting three-digit numbers hundreds are subtracted from hundreds are subtracted from hundreds are subtracted from hundreds and/or a ten when subtracting numbers. It is sometimes necessary to decompand/or a ten when subtracting numbers. It is sometimes necessary to decompand/or a ten when subtracting numbers. Mathematical properties explain math that are always true. The commutative explains that two numbers can be add without changing the sum and the assessment of the sum will not changing the sum sum sum sum sum sum sum sum sum sum	of the hundreds, combined within e a hundred rs together. s, all of the eds, the tens are re subtracted from ose a hundred ers. hematical rules ve property ded in any order sociative property can be added in uge.	 How is adding three-digit numbers like adding two-digit numbers? How is it different? How is subtracting three-digit numbers like subtracting two-digit numbers? How is it different? Does the order you add numbers in matter? Why or why not? 				
Key Concepts	Related Concepts	5	Vocabulary			
 I can add and subtract within 1000 using place value strategies. (2.CA.4) I can add and subtract within 1000 using modeling strategies. (2.CA.4) I can add and subtract within 1000 by drawing. (2.CA.4) I can describe and explain strategies used to add and subtract within 1000. (2.CA.4) I can show that when adding or subtracting, I perform the given operation on digits in matching place values. (2.CA.4) I can use regrouping to add or subtract within 1000. (2.CA.4) 	 I can show how the two numbers are change the sum. I can show how g in different orders the sum. (2.CA.6) I can show that n added in any ordeted in any ordeted in any ordeted in any ordeted in and subta 1,000. (2.CA.7) I can extend num addition and subta 1,000. (2.CA.7) I can state rules f patterns using ad subtraction within 	he order in which added won't (2.CA.6) grouping numbers s will not change) umbers can be er. (2.CA.6) ber patterns for traction within ther patterns for traction within for number Idition and 1,000. (2.CA.7)	 Associative Property Commutative Property Difference Number pattern Place value Regroup Sum 			
wathematical Processes						

- PS.4 Model with mathematics.
- PS.6 Attend to precision.

Resources						
Proficiency Scales • 2.CA.4	Digital • IDOE Examples/Tasks 2.CA.4 • IDOE Examples/Tasks 2.CA.6 • IDOE Examples/Tasks 2.CA.7		Manipulatives • <u>Base Ten Blocks</u> • <u>Base Ten Blocks Version 2</u> • <u>Interactive 120s Chart</u> • <u>Place-Value Cards</u> • <u>Place-Value Discs</u> • <u>Place-Value Mat</u> • <u>Two Color Counters</u>			
	School R	esources				
Textbook Lessons: Lesson 14: Addition and Subtraction N (5 days) Lesson 15: Add Several Two-Digit Nur Lesson 16: Add Three-Digit Numbers (Lesson 17: Subtract Three-Digit Numb Lesson 18: Add and Subtract Three-Di (5 days)	lumber Patterns nbers (5 days) (5 days) ers (5 days) igit Numbers	Formative Assess Lesson 14 Quiz Lesson 15 Quiz Lesson 16 Quiz Lesson 17 Quiz Lesson 18 Quiz Unit 2 Assessment	sments			

General Description of the Unit In this unit students will use tools to n relationships of units within systems. involving lengths. Students will also b students were comparing and orderin measurement.	neasure length with Students will solve le introduced to volu lg objects using dire	the metric and star real-world problem ume (capacity) usin ect comparison and	ndard systems and describe the s using addition and subtraction g cups and pints. In first grade, non-standard units of	
 Priority Standards 2.CA.1: Add and subtract fluently with 2.M.2: Estimate and measure the len selecting and using appropriate tools yardsticks, meter sticks, and measuri nearest inch, foot, yard, centimeter and 	hin 100. gth of an object by such as rulers, ng tapes to the nd meter.	 Supporting Standards 2.CA.3: Solve real-world problems involving addition and subtraction within 100 in situations involving lengths that are given in the same units (e.g., by using drawings, such as drawings of rulers, and equations with a symbol for the unknown number to represent the problem). 2.M.1: Describe the relationships among inch, foot, and yard. Describe the relationship between centimeter and meter. 2.M.3: Understand that the length of an object does not change regardless of the units used. Measure the length of an object twice using length units of different lengths for the two measurements. Describe how the two measurements relate to the size of the unit chosen. 2.M.4: Estimate and measure volume (capacity) using cups and pints. 		
 Enduring Understandings There are different appropriate tools a measurement based on the situation. which tool and unit is best. Units within a measurement system a be converted between. Length is stagnant and does not char of measure. Volume represents the liquid capacity dimensional object. 	and units for You must select are related and can age based on unit of a three-	 Essential Questio How do you choo something? What How do you choo something? What What are the step something? How do you choo something? What When might you 	ns ise which tool is right to measure at are examples of different tools? ise which unit is right to measure at are examples of different units? is you use to measure the length of ise which unit is right to measure at are examples of different units? need to find the volume of an object?	
 Key Concepts I can add within 100. (2.CA.1) I can subtract within 100. (2.CA.1) I can estimate the length of an object to the nearest inch, foot, yard, centimeter and meter. (2.M.2) I can measure to the nearest inch, foot, yard, centimeter, and meter. (2.M.2) I can use a ruler, yardstick, and meter stick to measure lengths. (2.M.2) 	 Related Concepts I can solve real-winvolving adding a lengths within 100 the same units. (2) I can use drawing with a symbols real unknown number world problems in and subtracting let (2.CA.3) I can describe the between inch, for (2.M.1) I can describe the between centime (2.M.1) I can understand an object does not matter what unit in (2.M.3) 	yorld problems and subtracting 0 when given in 2.CA.3) gs and equations epresenting the r to solve real- nvolving adding engths within 100. e relationship ot, and yard. e relationship ter and meter. that the length of ot change no it is measured in.	Vocabulary • Addend • Centimeter • Cup • Difference • Equation • Estimate • Foot • Inch • Length • Meter • Metric System • Millimeter • Pint • Ruler • Sum • Unit of measurement • US Standard System • Volume • Yard	

Mathematical Processes • PS.2 Reason abstractly and quantitation	 I can measure th object twice using and describe how measurements re the chosen unit. I can estimate vo cups and pints. (2) I can measure vo pints. (2.M.4) 	e length of an g different units v the two elate to the size of (2.M.3) Jume (capacity) in 2.M.4) Dume in cups and	
PS.5 Use tools appropriately.			
	Reso	urces	
Proficiency Scales	Digital		Manipulatives
• 2.CA.1 - template	IDOE Examples	Tasks 2.CA.1	Base Ten Blocks
• <u>2.CA.3</u>	IDOE Examples	/Tasks 2.M.2	Base Ten Blocks Version 2
• <u>2.M.2</u>	IDOE Examples	/Tasks 2.CA.3	Interactive 120s Chart Opling Buller Prosting
	IDOE Examples/Tasks 2.M.1		Online Ruler Practice Place-Value Cards
	IDOE Examples/Tasks 2.M.3 IDOE Examples/Tasks 2.M.4		Place-Value Discs
			Place-Value Mat
School Resources			
Textbook		Formative Asses	sments
Lesson 19: Understand Length and Measurement Tools		Lesson 19 & 24 Quiz	
Lesson 24: Measure with Cups and Pir	nts	Lesson 20 Quiz	
(Combine Lesson 19 and 24-5 days to	otal)	Lesson 21 Quiz	
Lesson 20: Measure Length (5 days)		Lesson 22 Quiz	
Lesson 21: Understand Measurement with Different Units		Lesson 23 Quiz	
(4 days)			
Lesson 23: Add and Subtract Lengths (5 days)			
5 () ,			

General Description of the Unit In this unit students will tell and write time to the nearest 5 minutes and describe relationships of time. Students will solve real world problems involving intervals of time to the half hour. In first grade, students learned to tell and write time to the nearest half hour. **Priority Standards** Supporting Standards • 2.M.5: Tell and write time to the nearest five minutes • 2.M.6: Describe relationships of time, including: seconds in a minute; minutes in an hour; hours in a from analog clocks, using a.m. and p.m. Solve realworld problems involving addition and subtraction of day; days in a week; and days, weeks, and months in a time intervals on the hour or half hour. vear. • 2.NS.1: Count by ones, twos, fives, tens, and hundreds up to at least 1,000 from any given number. • 2.NS.4: Match the ordinal numbers first, second, third, etc., with an ordered set up to 30 items. **Enduring Understandings Essential Questions** • When the minute hand points to one of the numbers on • When in your life do you need to find elapsed time? the clock, an interval of five minutes of time is shown. How do you find how much time has passed? You can count by fives, starting at the 1, to determine • What are examples of things you are doing when the the number of minutes after the hour. time is a.m.? What are examples of things you are Elapsed time is used to find the amount of time doing when the time is p.m.? Why are these between a start and end time or to find a start or end abbreviations important? time when the start or end time and elapsed time is • What patterns on a clock can you describe? How are given. they helpful in telling time? What do you know about • The abbreviations a.m. and p.m. are used to designate the numbers and hands on a clock? if a time occurs between midnight and noon or between Why are different measures of time important? What noon and midnight. do you know about each unit of time? • The hour hand moves as the minute hand moves, and it does not always point directly at the number for the hour. Time can be measured in multiple units, including years, months, weeks, days, hours, minutes, and seconds. These measurement units can be converted between. **Key Concepts Related Concepts** Vocabulary • I can tell time to the nearest five I can show how many seconds are Analog clock minutes on an analog clock. (2.M.5) in one minute. (2.M.6) Count on • I can write time to the nearest five • I can show how many minutes are Dav minutes on an analog clock. (2.M.5) in an hour. (2.M.6) • Hour • I can show how many hours are in • I can use a.m. and p.m. to write the Minute time. (2.M.5) a day. (2.M.6) • Month · I can solve real-world problems that I can show how many days are in a Ordinal involve adding and subtracting time week. (2.M.6) Second on the hour or half hour. (2.M.5) • I can show how many weeks are in • Time interval a month. (2.M.6) • Week • I can show how many months are Year in a year. (2.M.6) • I can explain the relationship between different units of time. (2.M.6) • I can count on by ones from any number up to 1,000. (2.NS.1) • I can count on by fives from any number up to 1,000. (2.NS.1) • I can match numbers with their ordinals in an ordered set with up to 30 items. (2.NS.4)

Mathematical ProcessesPS.5 Use tools appropriately.			
 PS.6 Attend to precision. 			
	Reso	urces	
Proficiency Scales • <u>2.M.5</u>	Digital IDOE Examples/Tasks 2.M.5 IDOE Examples/Tasks 2.M.6 IDOE Examples/Tasks 2.NS.1 IDOE Examples/Tasks 2.NS.4 		Manipulatives • <u>Analog Clock</u> • <u>Bear Counters</u> • <u>Clock Version 2</u> • <u>Interactive 120s Chart</u> • <u>Two-Clocks</u>
	School R	esources	
Textbook		Formative Assess	sments
Notes: Supplement 2.M.5		Lesson 26 Quiz	
Lesson 26: Tell Time			

General Description of the Unit In this unit students will learn the value of and count coins and dollars in a mixed collection using their knowledge of skip counting. In first grade, students found the value of pennies, nickels, and dimes in a collection. **Priority Standards** Supporting Standards • 2.M.7: Find the value of a collection of pennies, nickels, • 2.NS.1: Count by ones, twos, fives, tens, and hundreds up to at least 1,000 from any given number. dimes, guarters and dollars. **Essential Questions** Enduring Understandings The United States uses money that includes coins such How are pennies, nickels, dimes, and guarters alike? as the penny, nickel, dime, and quarter, as well as bills How are they different? of different values. • Why is it important to be able to find the value of a • Money can be used to buy things. Other countries collection of money? What is a big amount of money, have different kinds of money. why? What might you be able to buy with this amount? • Coins look different and have different values. What is a small amount of money, why? What might you be able to buy with this amount? • Patterns in counting by tens, fives, and ones can be used to help count dollars, dimes, nickels, and pennies. • Which coins are the most difficult for you to count? It is often easiest to count money by descending value. **Key Concepts Related Concepts** Vocabulary • I can find the value of a set of • I can count on by ones from any Count on pennies, nickels, dimes, quarters, number up to 1,000. (2.NS.1) • Value and dollars. (2.M.7) • I can count on by twos from any number up to 1,000. (2.NS.1) • I can count on by fives from any number up to 1,000. (2.NS.1) • I can count on by tens from any number up to 1,000. (2.NS.1) • I can count on by hundreds from any number up to 1,000. (2.NS.1) **Mathematical Processes** • PS.6 Attend to precision. Resources **Proficiency Scales** Digital **Manipulatives** • 2.M.7 • IDOE Examples/Tasks 2.M.7 • Digital Coins Version 2 • IDOE Examples/Tasks 2.NS.1 • Digital Coins- Heads and Tails Interactive 120s Chart School Resources Textbook Formative Assessments Lesson 27 Quiz Notes: Focus on finding the value of a collection of pennies, nickels, dimes, quarters, and dollars. Unit 3 Assessment Supplement: Coin Recognition Find the value of pennies Find the value of nickels Find the value of dimes Find the value of quarter Find the value of mixed coins *Start introducing coins during calendar time Lesson 27: Find the Value of Money (15 days)

General Description of the Unit			
In this unit students will investigate two- and three-dimensional shapes and classify them by their defining attributes. Students will create, draw, compose and decompose shapes. In first grade, students learned to identify and classify shapes by attributes and relate two-dimensional shapes as faces of three-dimensional shapes.			
Priority Standards		Supporting Stand	ards
• 2.G.1: Identify, describe, and classify two- and three- dimensional shapes (triangle, square, rectangle, cube, right rectangular prism) according to the number and shape of faces and the number of sides and/or vertices. Draw two-dimensional shapes		 2.G.2: Create squares, rectangles, triangles, cubes, and right rectangular prisms using appropriate materials. 2.G.3: Investigate and predict the result of composing and decomposing two- and three-dimensional shapes. 	
Enduring Understandings		Essential Questio	ns
• Two- and three-dimensional shapes can be classified, sorted, and drawn based on defining attributes such as the number of sides, vertices, and faces.		 How could you describe a cube (or other shape) to someone who couldn't see it? Can you use enough detail to get them to guess the shape you're describing? Can you give steps to draw a rectangle? What are important details? How would these steps be different for a square? 	
Key Concepts	Related Concepts	5	Vocabulary
 I can identify two- and three-dimensional shapes. (2.G.1) I can describe two- and three-dimensional shapes. (2.G.1) I can classify three-dimensional shapes according to the number and shape of the faces. (2.G.1) I can classify two-dimensional shapes according to the number of sides and/or vertices. (2.G.1) I can draw two-dimensional shapes. (2.G.1) 	 I can create squares. (2.G.2) I can create rectangles. (2.G.2) I can create triangles. (2.G.2) I can create right rectangular prisms. (2.G.2) I can investigate the impact of decomposing two- and three-dimensional shapes. (2.G.3) I can investigate the impact of composing two- and three-dimensional shapes. (2.G.3) I can predict the result of composing two and three dimensional shapes. (2.G.3) I can predict the result of composing two and three dimensional shapes. (2.G.3) I can predict the result of decomposing two and three dimensional shapes. (2.G.3) 		 Compose Cube Decompose Face Investigate Predict Rectangle Rectangular prism Sides Square Three-dimensional Triangle Two-dimensional Vertex

Mathematical Processes

- PS.3 Construct convincing arguments and critique the reasoning of others.PS.4 Model with mathematics.

Resources

Proficiency Scales	Digital	Manipulatives
• <u>2.G.1</u>	IDOE Examples/Tasks 2.G.1	Digital Geoboards
	IDOE Examples/Tasks 2.G.2	Geogebra Geometry
	IDOE Examples/Tasks 2.G.3	Geometric Solids
		Interactive Cone
		Interactive Cylinder
		Interactive Geometric Solids
		Interactive Prisms
		Interactive Spheres
		Interactive
		Triangular/Rectangular Pyramids
		<u>Pattern Blocks</u>
		Printable 3-D Nets

School Resources			
Textbook	Formative Assessments		
Lessons: Lesson 28: Recognize and Draw Shapes (4 days) Lesson 29: Compose and Decompose Shapes (5 days)	Lesson 28 Quiz Lesson 29 Quiz		

General Description of the Unit In this unit students will be introduced to arrays with up to 5 columns and 5 rows and represent these arrays with repeated addition equations.			
Priority Standards		Supporting Standards	
• 2.G.4: Partition a rectangle into rows and columns of same-size (unit) squares and count to find the total number of same-size squares.		• 2.CA.5: Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal groups.	
Enduring Understandings		Essential Questio	ons
 Using repeated addition equations to represent arrays can help to quickly find the sum instead of counting squares individually. Rectangles can be partitioned into columns (vertical) and rawa (barizontal). 		 How can you quickly find the number of blocks/objects arranged in an array? 	
Key Concepts	Related Concepts	5	Vocabulary
 I can partition a rectangle into squares of equal size. (2.G.4) After partitioning a rectangle into equal sized squares, I can count the number of same- size squares. (2.G.4) 	 I can add to find the total number of objects within a rectangular array up to 5 rows and 5 columns. (2.CA.5) I can write an equation to show the total as a sum of equal groups. (2.CA.5) 		 Array Fraction Partition Sum
Mathematical Processes			
• PS.6 Attend to precision.			
 PS.7 Look for and make use of struct 	ture.		
Profisionay Saalaa	Digital	urces	Manipulativaa
• 2 CA 5	• IDOF Examples	Tasks 2 G 4	Color Blocks
• 2.G.4- template	IDOE Examples	Tasks 2.CA.5	
School Resources			
Textbook		Formative Assess	sments
Lessons:		Lesson 30 Quiz Lesson 31 Quiz	
Lesson 30: Add Using Arrays (4 days) Lesson 31: Understand Tiling in Rectangles (4 days)			

General Description of the Unit In this unit students will partition circles and rectangles into two, three, and four equal parts and will use fraction vocabulary to describe halves, thirds, and fourths. In first grade, students learned to partition and describe the halves and fourths. **Priority Standards** Supporting Standards N/A • 2.G.5: Partition circles and rectangles into two, three, or four equal parts; describe the shares using the words halves, thirds, half of, a third of, etc.; and describe the whole as two halves, three thirds, four fourths. Recognize that equal parts of identical wholes need not have the same shape. **Enduring Understandings Essential Questions** • Shapes can be partitioned in many different ways to When do you see shapes split into fractions at home or represent fractional amounts. at school? • The number of equal-sized pieces that are made • If a pizza was cut into tenths, how many pieces would it through a partition represent a fractional amount such have? How do you know? as halves, thirds, and fourths. Two halves, three thirds, How many ways can you partition a square into and four fourths are all equal to one whole. fourths? How do you know all your examples represent • A shape can be partitioned in different ways and still fourths? represent the same fractional amount, even if the • How do halves and fourths relate to time and money? pieces do not look the same. **Key Concepts Related Concepts** Vocabulary • I can partition circles into two, N/A Denominator three, and four equal parts. (2.G.5) • Fraction • I can partition rectangles into two, Numerator three, and four equal parts. (2.G.5) • Whole • I can identify halves, thirds, and fourths. (2.G.5) • I can describe partitions of circles and rectangles. (2.G.5) • I can describe a whole as two halves, three thirds, and four fourths. (2.G.5) • I can recognize that equal parts of identical wholes do not need to have the same shape. (2.G.5) Mathematical Processes PS.4 Model with mathematics. PS.6 Attend to precision. Resources **Proficiency Scales** Digital **Manipulatives** • <u>2.G.5</u> • IDOE Examples/Tasks 2.G.5 • Circle and Rectangle Partitions • IDOE Examples/Tasks 2.G.3 • Fraction Circles

School Resources		
Textbook	Formative Assessments	
Lessons:	Lesson 32 Quiz	
Lesson 32: Understand Halves, Thirds, and Fourths in Shapes (4 days)	Unit 4 Assessment	

General Description of the Unit In this unit students will draw single unit scale picture and bar graphs to represent data with up to four choices. Students will analyze the data to solve simple problems. In first grade, students learned to organize and interpret data with up to three choices and ask questions about the data.			
Priority Standards	nale unit ecole)	Supporting Stand	ards
• 2.DA.1: Draw a picture graph (with single-unit scale) and a bar graph (with single-unit scale) to represent a data set with up to four choices (What is your favorite color? red, blue, yellow, green). Solve simple put- together, take-apart, and compare problems using information presented in the graphs.		• N/A	
Enduring Understandings		Essential Questio	ns
 Different types of graphs such as pict bar graphs can be used to visually re 	ure graphs and present data.	 What are graphs bar graphs alike? 	used for? How are picture graphs and How are they different?
Graphs can be analyzed to answer q data	uestions about	What question we gather data about	could you like to ask your classmates to
 The scale on a graph represents the value of a single 		answers using a	graph?
box or picture in the graph.		 What are the imp important? 	ortant parts of a graph? Why are they
Key Concepts	Related Concepts		Vocabulary
• I can draw a picture graph. (2.DA.1)	• N/A		• Bar graph
 I can draw a bar graph. (2.DA.1) I can represent data sets that have up to four choices using bar graphs and picture graphs. (2.DA.1) I can solve simple addition 			ComparePicture graph
subtraction, and comparison problems using information shown on a graph. (2.DA.1)			
Mathematical Processes			
 PS.3 Construct convincing arguments and critique the reasoning of others. PS.6 Attend to precision. 			
	Reso	urces	
Proficiency Scales	Digital		Manipulatives
• <u>2.DA.1</u>	• IDOE Examples/	<u>/lasks 2.DA.1</u>	<u>Color Bar Graphs</u> <u>Color In Graph</u> <u>Pictographs</u>

School Resources		
Textbook	Formative Assessments	
Lesson 25: Bar Graphs and Picture Graphs (5 days)	Lesson 25 Quiz Unit 5 Assessment	