Mathematics

2nd Grade

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Superintendent of Schools:

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Grade 2 Mathematics Curriculum

Course Description:

Grade 2 mathematics is taught in eleven chapters throughout the school year. The second grade curriculum is heavily based on extending understanding of place value, base-ten notation, building fluency with addition and subtraction, using standard units of measure, and describing and analyzing shapes. Each chapter involves the use of hands on math manipulatives to allow a concrete concept for the students to grasp before moving to a more abstract understanding of each topic. By following the sequence and hands on math activities in the curriculum the second grade students are taught to apply mathematics in real world situations, as well as meet the New Jersey Student Learning Standards for second grade.

Course Sequence:

Chapter 11: Geometry (6 days)
Chapter 1: Number Concepts (16 days)
Chapter 2: Numbers to 1,000 (18 days)
Chapter 3: Basic Facts and Relationships (17 days)
Chapter 4: 2-Digit Addition (7 days)
Chapter 6: 3-Digit Addition (7 days)
Chapter 5: 2-Digit Subtraction (5 days)
Chapter 6: 3-Digit Subtraction (12 days)
Chapter 7: Money and Time (10 days)
Chapter 11: Geometry (13 days)
Chapter 8: Length in Customary Units (8 days)
Chapter 9: Length in Metric Units (7 days)
Chapter 10: Data (8 days)

Prerequisite:

Kindergarten and first grade mathematics

Unit # 1	
Overview	
Content Area: Mathematics	
Unit Title: Chapter 1: Number Concepts	
Grade Level: Second	
Core Ideas: In this unit, students will build upon their prior knowledge of counting by using patterns and place value to count within 100 and within 1,000. They will focus on using place value concepts to understand the value of digits within a number and the other ways to represent two-digit numbers. Base-ten blocks will be used to give the students hands-on experience. Students will also use place value to compose and decompose numbers.	
Standards (Content and Technology)**:**	
CPI#:	**Statement:**
Performance Expectations (NJSLS)	
2.NBT.A.2	A. Understand place value. 2. Count within 1000; skip-count by 5s, 10s, and 100s.
2.NBT.A.3	A. Understand place value. 3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
2.OA.C.3	C. Work with equal groups of objects to gain foundations for multiplication. 3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.
Career Readiness (9.2), Life Literacies, and Key Skills (9.1, 9.4)	
9.1.2.CR.1	Recognize ways to volunteer in the classroom, school and community
9.4.2.TL.1	Identify the basic features of a digital tool and explain the purpose of the tool (e.g., 8.2.2.ED.1)
Computer Science and Design Thinking (8)	
8.1.2.CS.1	Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
SMP.1	Make sense of problems and persevere in solving them.
SMP.2	Reason abstractly and quantitatively.
SMP.3	Construct viable arguments and critique the reasoning of others.
SMP.4	Model with mathematics.
SMP.6	Attend to precision.
Interdisciplinary Connection	
RL.2.10.	Read and comprehend literature, including stories and poetry, at grade level text complexity or above with scaffolding as needed.
RI.2.4.	Determine the meaning of words and phrases in a text relevant to a *grade 2 topic or subject area*.
RF.2.4.	Read with sufficient accuracy and fluency to support comprehension.
SL.2.1.	Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
L.2.3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
Cross Cultural Statements/ Mandates (Amistad, Holocaust, LGBT, SEL)	
Self Management	Recognize the skills needed to establish and achieve personal and educational goals.

Unit Essential Question(s):	**Unit Enduring Understandings:**
● How are even numbers and odd numbers different? ● How do you know the value of a digit? ● How do you describe a 2-digit number as tens and ones? ● What are different ways to write a 2-digit number? ● How can you show the value of a number in different ways? ● How do you count by 1s, 5s, and 10s, 100s within 1000	● Number are made up of a combination of digits (0, 1, 2, 3, 4, 5, 6, 7, 8, 9). ● Strengthen understanding of place value to determine the value of a digit in the number. ● Numbers can be expressed in multiple ways.

Evidence of Learning

Formative Assessments:

- Observation
- Questioning
- Discussion
- Exit ticket
- Graphic organizer
- Self assessment
- Practice problems
- Visual representations
- Kinesthetic assessments
- Individual Whiteboard participation

Summative/Benchmark Assessment(s):

- SGO Test
- Mid-chapter checkpoint
- Chapter 1 Assessment

Resources/Materials:

Second Grade Student Learning Standards:
https://www.nj.gov/education/standards/math/Docs/2016NJSLS-M_Grade2.pdf
Think Central Portal:
https://www-k6.thinkcentral.com/ePC/start.do

Key Vocabulary:

- even
- odd
- equation
- addend
- value
- digit
- place value
- tens
- ones
- 2-digit number
- expanded form
- word form
- standard form
- equivalent
- pattern
- hundreds chart

Suggested Pacing Guide

Lesson Name/ Topic	Student Learning Objective(s)	Suggested Tasks/Activities:	Day(s) to Complete
SGO Test Procedures	Assess knowledge and understanding of second grade standards	• Assessment	1 day
SGO Test Problem Solving	Assess knowledge and understanding of second grade standards	• Assessment	1 day
Lesson 1.1 Even and Odd Numbers	Classify numbers up to 20 as even or odd.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day

Lesson 1.2 Represent Even Numbers	Write equations with equal addends to represent even numbers.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 1.3 Understand Place Value	Use place value to describe the values of digits in 2-digit numbers.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 1.4 Expanded Form	Write 2-digit numbers in expanded form.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 1.5 Different Ways to Write a Number	Write 2-digit numbers in word form, expanded form, and standard form.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games) ● Checkpoint	1 day
Renaming 2-digit Numbers	Apply place value concepts to find equivalent representations of numbers.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	2 days
Lesson 1.7 Problem Solving - Tens and Ones	Solve problems by finding different combinations of tens and ones to represent 2-digit numbers using the strategy find a pattern.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 1.8 Counting Patterns Within 100	Extend counting sequences within 100, counting by 1s, 5s, and 10s.	Students will be introduced to different concepts/strategies and will implement them independently. ● Use hundreds chart ● 10 more/10 less ● whiteboard practice	4 day

		• Independent practice (workbook) • Partner practice (fluency games)	
Chapter 1 review	Assess knowledge and understanding of Chapter 1 material	Students will be introduced to different concepts/strategies and will implement them independently. • Review	1 day
Chapter 1 Assessment	Assess knowledge and understanding of Chapter 1 material	Students will be introduced to different concepts/strategies and will implement them independently. • Assessment	1 day

Teacher Notes:

Additional Resources:

- IXL second grade math skills
- Read alouds:
  - Spunky Monkeys on Parade

Differentiation/ Modification Strategies

Students with Disabilities	English Language Learners	Gifted and Talented Students	Students at Risk	504 Students
• Consult with Case Managers and follow IEP /modifications • Provide number line • Provide hundreds chart • Rephrase questions, directions, and explanations • Allow extended time to answer question	• Assign a buddy, same language or English speaking • Allow errors in speaking • Rephrase questions, directions, and explanations • Allow extended time to answer questions	• Provide extension activities • Build on students' intrinsic motivations	• Consult with Guidance Counselors and follow I&RS procedures/ action plans • Consult with classroom teacher(s) for specific behavior interventions • Provide rewards as necessary	• Consult with Case Managers and follow 504 accommodations/ modifications • Provide number line • Provide hundreds chart • Rephrase questions, directions, and explanations • Allow extended time to answer question

Unit # 2	
Overview	
Content Area: Mathematics	
Unit Title: Chapter 2: Numbers to 1,000	
Grade Level: 2	
Core Ideas: In this unit, students will extend their knowledge of place value as they explore 3- digit numbers. They learn that the digits of a 3- digit number represent hundreds, tens, and ones. Students will get hands-on experience when building 3-digit numbers with base-ten blocks. Students use this understanding to compare 3-digit numbers. They will also use place value and patterns to add and subtract mentally. They will learn to to mentally add and subtract 10 or 100 to or from a given number 100–900.	
Standards (Content and Technology)**:**	
CPI#:	**Statement:**
Performance Expectations (NJSLS)	
2.NBT.A.1	A. Understand place value. 1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
2.NBT.A.1a	A. Understand place value. 1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: a. 100 can be thought of as a bundle of ten tens — called a “hundred.”
2.NBT.A.1b	A. Understand place value. 1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
2.NBT.A.3	A. Understand place value. 3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
2.NBT.A.4	A. Understand place value. 4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.
2.NBT.B.8	B. Use place value understanding and properties of operations to add and subtract. 8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.
Career Readiness (9.2), Life Literacies, and Key Skills (9.1, 9.4)	
9.4.2.CT.2	Identify possible approaches and resources to execute a plan (e.g., Inductive, deductive)
Computer Science and Design Thinking (8)	
8.1.2.CS.1	Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences
SMP.1	Make sense of problems and persevere in solving them.
SMP.3	Construct viable arguments and critique the reasoning of others.
SMP.4	Model with mathematics.
SMP.5	Use appropriate tools strategically.
SMP.6	Attend to precision.
Interdisciplinary Connection	
RL.2.10.	Read and comprehend literature, including stories and poetry, at grade level text complexity or above with scaffolding as needed.
RI.2.4.	Determine the meaning of words and phrases in a text relevant to a *grade 2 topic or subject area*.
RF.2.4.	Read with sufficient accuracy and fluency to support comprehension.
SL.2.1.	Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
L.2.3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
Cross Cultural Statements/ Mandates (Amistad, Holocaust, LGBT, SEL)	
Self Awareness	Recognize the impact of one’s feelings and thoughts on one’s own beavior

Unit Essential Question(s):	**Unit Enduring Understandings:**
● How do you know the values of the digits in numbers? ● What are three ways to write a 3-digit number? ● How do you use place value to find 10 more, 10 less, 100 more, or 100 less than a 3-digit number? ● How does place value help you identify and extend counting patterns? ● How do you compare 3-digit numbers?	● Number are made up of a combination of digits (0, 1, 2, 3, 4, 5, 6, 7, 8, 9). ● Strengthen understanding of place value to determine the value of a digit in the number. ● Numbers can be expressed in multiple ways.

Evidence of Learning

Formative Assessments:

- Observation
- Questioning
- Discussion
- Exit ticket
- Graphic organizer
- Self assessment
- Practice problems
- Visual representations
- Kinesthetic assessments
- Individual Whiteboard participation

Summative/Benchmark Assessment(s):

- Mid-chapter checkpoint
- Chapter 2 Assessment

Alternative Assessments:

Resources/Materials:	**Key Vocabulary:**
Second Grade Student Learning Standards: https://www.nj.gov/education/standards/math/Docs/2016NJSLS-M_Grade2.pdf Think Central Portal: https://www-k6.thinkcentral.com/ePC/start.do	● ones ● tens ● hundreds ● equalivent ● three-digit number ● concrete model ● pictorial model ● place value ● expanded form ● standard form ● patterns ● greater than ● less than ● equal to

Suggested Pacing Guide

Lesson Name/ Topic	**Student Learning Objective(s)**	**Suggested Tasks/Activities:**	**Day(s) to Complete**
Lesson 2.1 Group Tens as Hundreds	Understand that each group of 10 tens is equivalent to 1 hundred.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day

Lesson 2.2 Explore 3-digit Numbers	Write 3-digit numbers that are represented by groups of tens.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 2.3 Model 3-digit Numbers	Use concrete and pictorial models to represent 3-digit numbers.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 2.4 Hundreds, Tens, and Ones	Apply place value concepts to write 3-digit numbers that are represented by pictorial models.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Renaming 3-digit Numbers	Apply place value concepts to find equivalent representations of numbers.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	2 days
Lesson 2.5 Place Value to 1,000	Use place value to describe the values of digits in numbers to 1,000.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 2.6 Number Names	Read and write 3-digit numbers in word form.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 2.7 Different Forms of Numbers	Write 3-digit numbers in expanded form and in standard form.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook)	1 day

		• Partner practice (fluency games) • Checkpoint	
Lesson 2.8 Different Ways to Show Numbers	Apply place value concepts to find equivalent representations of numbers.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 2.9 Count On and Back by 10 and 100	Identify 10 more, 10 less, 100 more, or 100 less than a given number.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	2 days
Lesson 2.10 Number Patterns	Extend number patterns by counting on by tens or hundreds.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	2 days
Lesson 2.11 Compare Numbers	Solve problems involving number comparisons by using the strategy make a model.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 2.12 Compare Numbers	Compare 3-digit numbers using the >, =, and < symbols.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Chapter 2 Review	Review knowledge and understanding of Chapter 2 skills and concepts	Students will be introduced to different concepts/strategies and will implement them independently. • Review	1 day
Chapter 2 Assessment	Assess knowledge and understanding of Chapter 2 skills and concepts	Students will be introduced to different concepts/strategies and will implement them independently. • Assessment	1 day
Teacher Notes:			
Additional Resources: IXL second grade math skills Read aloud:			

- 100 Days of Cool

Differentiation/ Modification Strategies				
Students with Disabilities	**English Language Learners**	**Gifted and Talented Students**	**Students at Risk**	**505 Students**
● Consult with Case Managers and follow IEP /modifications ● Provide number line ● Provide hundreds chart ● Rephrase questions, directions, and explanations ● Allow extended time to answer question	● Assign a buddy, same language or English speaking ● Allow errors in speaking ● Rephrase questions, directions, and explanations ● Allow extended time to answer questions	● Provide extension activities ● Build on students' intrinsic motivations	● Consult with Guidance Counselors and follow I&RS procedures/ action plans ● Consult with classroom teacher(s) for specific behavior interventions ● Provide rewards as necessary	● Consult with Case Managers and follow 504 accommodations/ modifications ● Provide number line ● Provide hundreds chart ● Rephrase questions, directions, and explanations ● Allow extended time to answer question

Unit # 3	
Overview	
Content Area: Mathematics	
Unit Title: Chapter 3: Basic Facts and Relationships	
Grade Level: 2	
Core Ideas: In this unit, students will focus on building fluency in addition and subtraction within 20. They learn how to add and subtract within 20 using various strategies, which will help prepare them for 2 and 3-digit addition and subtraction. They use their knowledge of addition facts to better understand the relationship between addition and subtraction. As they get deeper in the unit, students will focus on solving addition and subtraction problems within 100.	
Standards (Content and Technology)**:**	
CPI#:	**Statement:**
Performance Expectations (NJSLS)	
2.OA.A.1	A. Represent and solve problems involving addition and subtraction. 1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
2.OA.B.2	B. Add and subtract within 20. 2. Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers
2.OA.C.4	C. Work with equal groups of objects to gain foundations for multiplication. 4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.
Career Readiness (9.2), Life Literacies, and Key Skills (9.1, 9.4)	
9.4.2.CT.2	Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3)
Computer Science and Design Thinking (8)	
8.1.2.AP.4	Break down a task into a sequence of steps
SMP.1	Make sense of problems and persevere in solving them.
SMP.2	Reason abstractly and quantitatively.
SMP.3	Construct viable arguments and critique the reasoning of others.
SMP.4	Model with mathematics.
SMP.5	Use appropriate tools strategically.
Interdisciplinary Connection	
RL.2.10.	Read and comprehend literature, including stories and poetry, at grade level text complexity or above with scaffolding as needed.
RI.2.4.	Determine the meaning of words and phrases in a text relevant to a *grade 2 topic or subject area*.
RF.2.4	Read with sufficient accuracy and fluency to support comprehension.
SL.2.1.	Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
L.2.3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening
Cross Cultural Statements/ Mandates (Amistad, Holocaust, LGBT, SEL)	
Self Awareness	Recognize the importance of self confidence in handling daily tasks

Unit Essential Question(s):	**Unit Enduring Understandings:**
● How can you use doubles facts to find sums for near doubles facts? ● How is the make a ten strategy used to find sums? ● How are addition and subtraction related? ● How does getting to 10 in subtraction help when finding differences?	● Building fluency basic facts (addition and subtraction) will help when working with 2 and 3-digit numbers. ● There is an inverse relationship between addition and subtraction. If 3 + 7=10, then 10 - 3=7

Evidence of Learning

Formative Assessments:

- Observation
- Questioning
- Discussion
- Exit ticket
- Graphic organizer
- Self assessment
- Practice problems
- Visual representations
- Kinesthetic assessments
- Individual Whiteboard participation

Summative/Benchmark Assessment(s):

- Mid-chapter Checkpoint
- Chapter 3 Assessment

Alternative Assessments:

Resources/Materials:
Second Grade Student Learning Standards:
https://www.nj.gov/education/standards/math/Docs/2016NJSLS-M_Grade2.pdf
Think Central Portal:
https://www-k6.thinkcentral.com/ePC/start.do

Key Vocabulary:

- Doubles facts
- near doubles facts
- sum
- make a 10
- addition facts
- subtraction facts
- number line
- bar model
- equal groups
- repeated addition
- array

Suggested Pacing Guide

Lesson Name/ Topic	Student Learning Objective(s)	Suggested Tasks/Activities:	Day(s) to Complete
Intro to Chapter 3	Access prior knowledge that will be used in chapter 3	• Assessment	1 day
Lesson 3.1 Use Doubles Facts	Use doubles facts as a strategy for finding sums for near doubles facts.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 3.2 Practice Addition Facts	Recall sums for basic facts using properties and strategies.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 3.3 Make a Ten to Add	Recall sums for addition facts using the make a ten strategy.	Students will be introduced to different concepts/strategies and will implement them independently.	2 days

		• whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	
Lesson 3.4 Add 3 Addends	Find sums of three addends by applying the Commutative and Associative Properties of Addition.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 3.5 Relate Addition and Subtraction	Use the inverse relationship of addition and subtraction to recall basic facts.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 3.6 Practice Subtraction Facts	Recall differences for basic facts using mental strategies.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 3.7 Use Ten to Subtract	Find differences on a number line to develop the mental strategy of decomposing to simplify facts.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	3 days
Lesson 3.8 Use Drawings to Represent Problems	Use bar models to represent a variety of addition and subtraction situations.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 3.9 Use Equations to Represent Problems	Write equations to represent and solve a variety of addition and subtraction situations.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day

Lesson 3.10 Equal Groups	Solve problems involving equal groups by using the strategy act it out.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 3.11 Repeated Addition	Write equations using repeated addition to find the total number of objects in arrays.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Chapter 3 Review	Review knowledge and understanding of Chapter 3 skills and concepts	Students will be introduced to different concepts/strategies and will implement them independently. ● Review	1 day
Chapter 3 Assessment	Assess knowledge and understanding of Chapter 3 skills and concepts	Students will be introduced to different concepts/strategies and will implement them independently. ● Assessment	1 day

Teacher Notes:

Additional Resources:
IXL second grade math skills
Read aloud:
- Animals on Board (+)
- Mall Mania (+)
- Elevator Magic (-)

Differentiation/ Modification Strategies

Students with Disabilities	English Language Learners	Gifted and Talented Students	Students at Risk	506 Students
● Consult with Case Managers and follow IEP /modifications ● Provide number line ● Provide hundreds chart ● Rephrase questions, directions, and explanations ● Allow extended time to answer question	● Assign a buddy, same language or English speaking ● Allow errors in speaking ● Rephrase questions, directions, and explanations ● Allow extended time to answer questions	● Provide extension activities ● Build on students' intrinsic motivations	● Consult with Guidance Counselors and follow I&RS procedures/ action plans ● Consult with classroom teacher(s) for specific behavior interventions ● Provide rewards as necessary	● Consult with Case Managers and follow 504 accommodations/ modifications ● Provide number line ● Provide hundreds chart ● Rephrase questions, directions, and explanations ● Allow extended time to answer question

Unit # 4	
Overview	
Content Area: Mathematics	
Unit Title: Chapter 4: 2-digit Addition	
Grade Level: 2	
Core Ideas: In this unit, students use place value to add 2-digit numbers. They will break apart addends as tens and ones. Students will model regrouping with base-ten blocks and learn how to record addition using the standard algorithm. Students will solve 2- digit addition problems using the bar model diagram and write equations using a symbol for an unknown addend or sum. Students will use learned skills to find sums for two, three, and four addends.	
Standards (Content and Technology)**:**	
CPI#:	**Statement:**
Performance Expectations (NJSLS)	
2.NBT.B.5	B. Use place value understanding and properties of operations to add and subtract. 5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
2.NBT.B.6	B. Use place value understanding and properties of operations to add and subtract. 6. Add up to four two-digit numbers using strategies based on place value and properties of operations.
2.NBT.B.9	B. Use place value understanding and properties of operations to add and subtract. 9. Explain why addition and subtraction strategies work, using place value and the properties of operations
2.OA.A.1	A. Represent and solve problems involving addition and subtraction. 1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
Career Readiness (9.2), Life Literacies, and Key Skills (9.1, 9.4)	
9.4.2.IML.4	Compare and contrast the way information is shared in a variety of contexts (e.g., social, academic, athletic) e.g., 2.2.2.MSC.5, RL2.9)
Computer Science and Design Thinking (8)	
8.2.2.ED.2	Collaborate to solve a simple problem, or to illustrate how to build a product using the design process
SMP.4	Model with mathematics.
SMP.5	Use appropriate tools strategically.
SMP.6	Attend to precision.
SMP.7	Look for and make use of structure.
SMP.8	Look for and express regularity in repeated reasoning.
Interdisciplinary Connection	
RL.2.10.	Read and comprehend literature, including stories and poetry, at grade level text complexity or above with scaffolding as needed.
RI.2.4.	Determine the meaning of words and phrases in a text relevant to a *grade 2 topic or subject area*.
RF.2.4.	Read with sufficient accuracy and fluency to support comprehension.
SL.2.1.	Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
L.2.3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
Cross Cultural Statements/ Mandates (Amistad, Holocaust, LGBT, SEL)	
Responsible Decision Making	Identify the consequences associated with one's actions in order to make constructive choices.

Unit Essential Question(s):	**Unit Enduring Understandings:**
● How does breaking apart a number make it easier to add? ● When do you regroup in addition? ● How do you write a number sentence to represent a problem?	● There is an inverse relationship between addition and subtraction. If 3 + 7=10, then 10 - 3=7 ● Regrouping is changing a number from one form to an equivalent form (ex: 1 ten to 10 ones)

Evidence of Learning

Formative Assessments:

- Observation
- Questioning
- Discussion
- Exit ticket
- Graphic organizer
- Self assessment
- Practice problems
- Visual representations
- Kinesthetic assessments
- Individual Whiteboard participation

Summative/Benchmark Assessment(s):

- 2-digit Addition Assessment

Alternative Assessments:

Resources/Materials:	**Key Vocabulary:**
Second Grade Student Learning Standards: https://www.nj.gov/education/standards/math/Docs/2016NJSLS-M_Grade2.pdf Think Central Portal: https://www-k6.thinkcentral.com/ePC/start.do	● place value ● break apart strategy ● 2-digit numbers ● regrouping ● Word Problems ● part-part whole

Suggested Pacing Guide

Lesson Name/ Topic	**Student Learning Objective(s)**	**Suggested Tasks/Activities:**	**Day(s) to Complete**
Partial Sums Iconic	Apply place-value concepts when using a break-apart strategy for 2-digit addition	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Partial Sums Symbolic	Apply place-value concepts when using a break-apart strategy for 2-digit addition	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
2-digit Addition Without Regrouping	Practice using the standard algorithm for 2-digit addition without regrouping.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
2-digit Addition	Practice using the standard algorithm for 2-digit addition with regrouping.	Students will be introduced to different concepts/strategies and will implement them independently.	2 days

With Regrouping		● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	
2-digit Addition Mini-Assessment	Assess knowledge and understanding of 2-digit addition	Students will be introduced to different concepts/strategies and will implement them independently. ● Assessment	1 day
2-digit Addition Word Problems	Solve word problems involving 2-digit addition using the part + part = whole strategy.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day

Teacher Notes:

Additional Resources:
IXL second grade math skills
Read aloud:
- A Fair Bear Share

Differentiation/ Modification Strategies

Students with Disabilities	English Language Learners	Gifted and Talented Students	Students at Risk	507 Students
● Consult with Case Managers and follow IEP /modifications ● Provide number line ● Provide hundreds chart ● Rephrase questions, directions, and explanations ● Allow extended time to answer question	● Assign a buddy, same language or English speaking ● Allow errors in speaking ● Rephrase questions, directions, and explanations ● Allow extended time to answer questions	● Provide extension activities ● Build on students' intrinsic motivations	● Consult with Guidance Counselors and follow I&RS procedures/ action plans ● Consult with classroom teacher(s) for specific behavior interventions ● Provide rewards as necessary	● Consult with Case Managers and follow 504 accommodations/ modifications ● Provide number line ● Provide hundreds chart ● Rephrase questions, directions, and explanations ● Allow extended time to answer question

Unit # 5

Overview

Content Area: Mathematics

Unit Title: Chapter 5: 2-digit Subtraction

Grade Level: 2

Core Ideas: In this unit, students use their understanding of place value to become more fluent with subtraction. Using their knowledge of place value, students will learn strategies to break apart numbers into tens and ones in order to subtract. They will use base ten blocks to model regrouping and learn how to record subtraction using the standard algorithm. They will also use their knowledge of the inverse relationship to add to find differences or missing addends. Students will draw diagrams and write equations to solve multi step subtraction word problems.

Standards (Content and Technology)**:**

CPI#:	**Statement:**
Performance Expectations (NJSLS)	
2.NBT.B.5	B. Use place value understanding and properties of operations to add and subtract. 5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
2.NBT.B.9	B. Use place value understanding and properties of operations to add and subtract. 9. Explain why addition and subtraction strategies work, using place value and the properties of operations
2.OA.A.1	A. Represent and solve problems involving addition and subtraction. 1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
Career Readiness (9.2), Life Literacies, and Key Skills (9.1, 9.4)	
9.4.2.CI.1	Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2)
Computer Science and Design Thinking (8)	
8.2.2.ED.2	Collaborate to solve a simple problem, or to illustrate how to build a product using the design process
SMP. 4	Model with mathematics
SMP.5	Use appropriate tools strategically.
SMP.6	Attend to precision.
SMP.7	Look for and make use of structure.
SMP.8	Look for and express regularity in repeated reasoning.
Interdisciplinary Connection	
RL.2.10.	Read and comprehend literature, including stories and poetry, at grade level text complexity or above with scaffolding as needed.
RI.2.4.	Determine the meaning of words and phrases in a text relevant to a *grade 2 topic or subject area*.
RF.2.4.	Read with sufficient accuracy and fluency to support comprehension.
SL.2.1.	Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
L.2.3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
Cross Cultural Statements/ Mandates (Amistad, Holocaust, LGBT, SEL)	
Social Awareness	Demonstrate an understanding of the need for mutual respect when viewpoints differ

Unit Essential Question(s):

- How do you solve subtraction problems?
- What strategies can you use to subtract acts?
- How can an addition fact help you solve a related subtraction fact?
- How can you make a ten to help you subtract?

Unit Enduring Understandings:

- There is an inverse relationship between addition and subtraction. If 3 + 7=10, then 10 - 3=7
- Regrouping is changing a number from one form to an equivalent form (ex: 1 ten to 10 ones)

Evidence of Learning

Formative Assessments:

- Observation
- Questioning
- Discussion
- Exit ticket
- Graphic organizer
- Self assessment
- Practice problems
- Visual representations
- Kinesthetic assessments
- Individual Whiteboard participation

Summative/Benchmark Assessment(s):

- Mid Chapter Checkpoint
- Chapter 5 Assessment

Alternative Assessments:

Resources/Materials:	**Key Vocabulary:**
Second Grade Student Learning Standards: https://www.nj.gov/education/standards/math/Docs/2016NJSLS-M_Grade2.pdf Think Central Portal: https://www-k6.thinkcentral.com/ePC/start.do	● subtraction ● regrouping ● whole - part = part strategy

Suggested Pacing Guide

Lesson Name/ Topic	**Student Learning Objective(s)**	**Suggested Tasks/Activities:**	**Day(s) to Complete**
2-digit Subtraction Iconic	Apply place-value concepts when using a break-apart strategy for 2-digit subtraction	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
2-digit Subtraction Symbolic	Practice using the standard algorithm for 2-digit subtraction without regrouping.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
2-digit Subtraction With Regrouping	Practice using the standard algorithm for 2-digit subtraction with regrouping.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
2-digit Subtraction	Solve word problems involving 2-digit subtraction using the whole - part = part strategy.	Students will be introduced to different concepts/strategies and will implement them independently.	1 day

Word Problems		• whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	
2-digit Subtraction Mini-Assessment	Assess knowledge and understanding of 2-digit subtraction	Students will be introduced to different concepts/strategies and will implement them independently. • Assessment	1 day

Teacher Notes:

Additional Resources:
IXL second grade math skills

Differentiation/ Modification Strategies

Students with Disabilities	English Language Learners	Gifted and Talented Students	Students at Risk	508 Students
• Consult with Case Managers and follow IEP /modifications • Provide number line • Provide hundreds chart • Rephrase questions, directions, and explanations • Allow extended time to answer question	• Assign a buddy, same language or English speaking • Allow errors in speaking • Rephrase questions, directions, and explanations • Allow extended time to answer questions	• Provide extension activities • Build on students' intrinsic motivations	• Consult with Guidance Counselors and follow I&RS procedures/ action plans • Consult with classroom teacher(s) for specific behavior interventions • Provide rewards as necessary	• Consult with Case Managers and follow 504 accommodations/ modifications • Provide number line • Provide hundreds chart • Rephrase questions, directions, and explanations • Allow extended time to answer question

Unit # 6	
Overview	
Content Area: Mathematics	
Unit Title: Chapter 6: 3-digit Addition and Subtraction	
Grade Level: 2	
Core Ideas: In this unit, students use strategies for adding and subtracting 3-digit numbers. They will use place value to break apart numbers into hundreds, tens, and ones to represent addition and subtraction. They use base-ten blocks to model and draw pictures to represent regrouping tens as ones and hundreds as tens when there is a zero in the tens place. Students will also practice using the standard algorithm for 3-digit addition and subtraction with and without regrouping.	
Standards (Content and Technology)**:**	
CPI#:	**Statement:**
Performance Expectations (NJSLS)	
2.NBT.B.7	B. Use place value understanding and properties of operations to add and subtract. 7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
Career Readiness (9.2), Life Literacies, and Key Skills (9.1, 9.4)	
9.4.2.IML.2	Represent data in a visual format to tell a story about the data (e.g., 2.MD.D.10)
Computer Science and Design Thinking (8)	
8.1.2.CS.2	Explain the functions of common software and hardware components of computing systems
SMP.4	Model with mathematics.
SMP.5	Use appropriate tools strategically.
SMP.6	Attend to precision.
SMP.7	Look for and make use of structure.
SMP.8	Look for and express regularity in repeated reasoning.
Interdisciplinary Connection	
RL.2.10.	Read and comprehend literature, including stories and poetry, at grade level text complexity or above with scaffolding as needed.
RI.2.4.	Determine the meaning of words and phrases in a text relevant to a *grade 2 topic or subject area*.
RF.2.4.	Read with sufficient accuracy and fluency to support comprehension.
SL.2.1.	Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
L.2.3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
Cross Cultural Statements/ Mandates (Amistad, Holocaust, LGBT, SEL)	
Self Management	Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals.

Unit Essential Question(s):	**Unit Enduring Understandings:**
● How can making a model help when solving addition and subtraction problems? ● How do you break apart addends to add hundreds, tens, and then ones? ● How do you know when to regroup in addition? ● How do you know when to regroup in subtraction? ● How do you regroup when there are zeros in the number you start with?	● You can add and subtract numbers within 100 using your knowledge of place value and facts within 20 ● Regrouping is changing a number from one form to an equivalent form (ex: 1 ten to 10 ones)

Evidence of Learning

Formative Assessments:

- Observation
- Questioning
- Discussion

- Exit ticket
- Graphic organizer
- Self assessment
- Practice problems
- Visual representations
- Kinesthetic assessments
- Individual Whiteboard participation

Summative/Benchmark Assessment(s):

- 3-digit Addition Assessment
- 3-digit Subtraction Assessment
- 3-digit Addition/Subtraction Word Problem Mini- Assessment

Alternative Assessments:

Resources/Materials:	**Key Vocabulary:**
Second Grade Student Learning Standards: https://www.nj.gov/education/standards/math/Docs/2016NJSLS-M_Grade2.pdf Think Central Portal: https://www-k6.thinkcentral.com/ePC/start.do	• addition • subtraction • place value • break aprat strategy • 3-digit numbers • regrouping • tens place • hundreds place • word problems • part + part = whole strategy • whole - part = part strategy

Suggested Pacing Guide

Lesson Name/ Topic	**Student Learning Objective(s)**	**Suggested Tasks/Activities:**	**Day(s) to Complete**
Partial Sums	Apply place-value concepts when using a break-apart strategy for 3-digit addition	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
3-digit Addition Without Regrouping	Practice using the standard algorithm for 3-digit addition without regrouping.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
3-digit Addition With Regrouping in the Tens	Practice using the standard algorithm for 3-digit addition with regrouping in the tens place	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day

3-digit Addition With Regrouping in the Hundreds	Practice using the standard algorithm for 3-digit addition with regrouping in the hundreds place	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
3-digit Addition With Regrouping	Practice using the standard algorithm for 3-digit addition with regrouping in the tens and hundreds place	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
2-digit & 3-digit Addition Word Problems	Solve word problems involving 2-digit addition using the part + part = whole strategy.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
3-digit Addition Assessment	Assess knowledge and understanding of 3-digit addition	Students will be introduced to different concepts/strategies and will implement them independently. ● Assessment	1 day
3-digit Subtraction Base Ten	Practice using the standard algorithm for 3-digit addition without regrouping	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
3-digit Subtraction With Regrouping in One Column	Practice using the standard algorithm for 3-digit subtraction with regrouping in one column	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
3-digit Subtraction With Regrouping in Two Columns	Practice using the standard algorithm for 3-digit subtraction with regrouping in two columns	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
3-digit Subtraction	Practice using the standard algorithm for 3-digit subtraction with regrouping when there are zeros in the minuend	Students will be introduced to different concepts/strategies and will implement them independently.	1 day

With Regrouping		• whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	
3-digit Subtraction With Regrouping	Practice using the standard algorithm for 3-digit subtraction with regrouping	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
2-digit and 3-digit Subtraction Word Problems	Solve word problems involving 2-digit subtraction using the whole - part = part strategy.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
3-digit Subtraction Assessment	Assess knowledge and understanding of 3-digit subtraction	Students will be introduced to different concepts/strategies and will implement them independently. • Assessment	1 day
Addition and Subtraction Word Problems	Solve word problems involving 2-digit and 3-digit addition and subtraction	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	4 days
Addition and Subtraction Word Problems Mini-Assessment	Assess knowledge and understanding of addition and subtraction word problems	Students will be introduced to different concepts/strategies and will implement them independently. • Assessment	1 day
Teacher Notes:			
Additional Resources: IXL second grade math skills			

Differentiation/ Modification Strategies				
Students with Disabilities	**English Language Learners**	**Gifted and Talented Students**	**Students at Risk**	**509 Students**
• Consult with Case Managers and follow IEP /modifications • Provide number line • Provide hundreds chart • Rephrase questions,	• Assign a buddy, same language or English speaking • Allow errors in speaking • Rephrase questions, directions, and explanations	• Provide extension activities • Build on students' intrinsic motivations	• Consult with Guidance Counselors and follow I&RS procedures/ action plans • Consult with classroom teacher(s) for	• Consult with Case Managers and follow 504 accommodations/ modifications • Provide number line • Provide hundreds chart

directions, and explanations ● Allow extended time to answer question	● Allow extended time to answer questions		specific behavior interventions ● Provide rewards as necessary	● Rephrase questions, directions, and explanations ● Allow extended time to answer question

Unit # 7

Overview

Content Area: Mathematics

Unit Title: Chapter 7: Money and Time

Grade Level: 2

Core Ideas: In this unit, students use their understanding of place value, addition, and subtraction to solve word problems involving dollar bills, quarters, dimes, nickels, and pennies. They will find the total value for varying money amounts, show the value of one dollar with coins, and find the value of amounts greater than one dollar.
Students will also extend their knowledge of telling and writing time to the hour and half hour, to telling time to the nearest five minutes as well as describing times as a.m. or p.m. They connect addition and subtraction to the concept of time as they learn to count on using analog clocks.

Standards (Content and Technology)**:**

CPI#:	**Statement:**
Performance Expectations (NJSLS)	
2.MD.C.7	C. Work with time and money. 7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
2.MD.C.8	C. Work with time and money. 8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?
Career Readiness (9.2), Life Literacies, and Key Skills (9.1, 9.4)	
9.1.2.FI.1	Differentiate the various forms of money and how they are used (e.g., coins, bills, checks, debit and credit cards)
Computer Science and Design Thinking (8)	
8.1.2.AP.2	Model the way programs store and manipulate data by using numbers or other symbols to represent information
SMP.1	Make sense of problems and persevere in solving them.
SMP.2	Reason abstractly and quantitatively.
SMP.3	Construct viable arguments and critique the reasoning of others
SMP.7	Look for and make use of structure.
SMP.8	Look for and express regularity in repeated reasoning.
Interdisciplinary Connection	
RL.2.10.	Read and comprehend literature, including stories and poetry, at grade level text complexity or above with scaffolding as needed.
RI.2.4.	Determine the meaning of words and phrases in a text relevant to a *grade 2 topic or subject area*.
RF.2.4.	Read with sufficient accuracy and fluency to support comprehension.
SL.2.1.	Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
L.2.3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
Cross Cultural Statements/ Mandates (Amistad, Holocaust, LGBT, SEL)	
Social Awareness	Recognize and identify the thoughts, feelings and perspectives of others.

Unit Essential Question(s):

- How do you find the total value of a group of coins?
- How can you show the value of one dollar with coins?
- How do you tell time to the hour and half hour on a clock?
- How do you tell and show time to five minutes?
- How do you use A.M. and P.M. to describe times?

Unit Enduring Understandings:

- Each coin is a piece of money, and has an individual value.
- As the minute hand moves on the clock, so does the hour hand.

Evidence of Learning

Formative Assessments:

- Observation
- Questioning

- Discussion
- Exit ticket
- Graphic organizer
- Self assessment
- Practice problems
- Visual representations
- Kinesthetic assessments
- Individual Whiteboard participation

Summative/Benchmark Assessment(s):

- Mid-chapter Checkpoint
- Chapter 7 Assessment

Alternative Assessments:

Resources/Materials:	**Key Vocabulary:**
Second Grade Student Learning Standards: https://www.nj.gov/education/standards/math/Docs/2016NJSLS-M_Grade2.pdf Think Central Portal: https://www-k6.thinkcentral.com/ePC/start.do	• Penny • Dime • Nickel • Quarter • Dollar • value • hour • half hour • minutes • AM • PM • clock

Suggested Pacing Guide

Lesson Name/ Topic	**Student Learning Objective(s)**	**Suggested Tasks/Activities:**	**Day(s) to Complete**
Lesson 7.1 Dimes, Nickels, Pennies	Find the total values of collections of dimes, nickels, and pennies.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 7.2 Quarters	Find the total values of collections of quarters, dimes, nickels, and pennies.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 7.5 One Dollar	Show one dollar in a variety of ways.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook)	1 day

		• Partner practice (fluency games)	
Lesson 7.6 Amounts Greater Than $1	Find and record the total value for money amounts greater than $1.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 7.7 Problem Solving with Money	Solve word problems involving money	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 7.8 Time to the Hour and Half Hour	Tell and write time to the hour and half hour.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 7.9 Time to 5 Minutes	Tell and write time to the nearest five minutes.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 7.10 Practice Telling Time	Practice telling time to the nearest five minutes.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 7.11 A.M. and P.M.	Tell and write time using A.M. and P.M.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Chapter 7 Assessment	Assess understanding of skills and concepts taught in Chapter 7	Students will be introduced to different concepts/strategies and will implement them independently. • Assessment	1 day
Teacher Notes:			

Additional Resources:
IXL second grade math skills
Read alouds:

- A Second is a Hiccup
- The Penny Pot
- The Coin Counting Book
- The Big Buck Adventure

Differentiation/ Modification Strategies				
Students with Disabilities	**English Language Learners**	**Gifted and Talented Students**	**Students at Risk**	**510 Students**
● Consult with Case Managers and follow IEP /modifications ● Provide number line ● Provide hundreds chart ● Rephrase questions, directions, and explanations ● Allow extended time to answer question	● Assign a buddy, same language or English speaking ● Allow errors in speaking ● Rephrase questions, directions, and explanations ● Allow extended time to answer questions	● Provide extension activities ● Build on students' intrinsic motivations	● Consult with Guidance Counselors and follow I&RS procedures/ action plans ● Consult with classroom teacher(s) for specific behavior interventions ● Provide rewards as necessary	● Consult with Case Managers and follow 504 accommodations/ modifications ● Provide number line ● Provide hundreds chart ● Rephrase questions, directions, and explanations ● Allow extended time to answer question

Unit # 8	
Overview	
Content Area: Mathematics	
Unit Title: Chapter 8: Lengths in Customary Units	
Grade Level: 2	
Core Ideas: In this unit, students measure and estimate lengths in standard units. Students will use inch models and rulers to measure and estimate lengths in inches. They then apply that knowledge to measuring and estimating in feet. Students will use their understanding of length, measurement, and estimation when they select appropriate tools for measuring different lengths and objets. They will also find differences between the lengths of two objects.	
Standards (Content and Technology)**:**	
CPI#:	**Statement:**
Performance Expectations (NJSLS)	
2.MD.A.1	A. Measure and estimate lengths in standard units. 1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
2.MD.A.2	A. Measure and estimate lengths in standard units. 2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
2.MD.A.3	A. Measure and estimate lengths in standard units. 3. Estimate lengths using units of inches, feet, centimeters, and meters.
2.MD.B.5	B. Relate addition and subtraction to length. 5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
2.MD.B.6	B. Relate addition and subtraction to length. 6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.
2.MD.D.9	D. Represent and interpret data. 9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.
Career Readiness (9.2), Life Literacies, and Key Skills (9.1, 9.4)	
9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive)
Computer Science and Design Thinking (8)	
8.2.2.ITH.3	Identify how technology impacts or improves life
SMP.1	Make sense of problems and persevere in solving them.
SMP.2	Reason abstractly and quantitatively.
SMP.3	Construct viable arguments and critique the reasoning of others.
SMP.4	Model with Mathematics.
SMP.5	Use appropriate tools strategically.
Interdisciplinary Connection	
RL.2.10.	Read and comprehend literature, including stories and poetry, at grade level text complexity or above with scaffolding as needed.
RI.2.4.	Determine the meaning of words and phrases in a text relevant to a *grade 2 topic or subject area*.
RF.2.4.	Read with sufficient accuracy and fluency to support comprehension.
SL.2.1.	Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
L.2.3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
Cross Cultural Statements/ Mandates (Amistad, Holocaust, LGBT, SEL)	
Social Awareness	Demonstrate an awareness of the expectations for social interactions in a variety of settings
Unit Essential Question(s):	**Unit Enduring Understandings:**

• How can you use inch models to measure length? • How do you use an inch ruler to measure lengths? • Why is measuring in feet different from measuring in inches? • How do you choose a measuring tool to use when measuring lengths?	• Length is linear – iterating length units by marking the length of the unit, sliding then marking the standard unit of measure repetitively to complete the measurement. • Identify objects that are longer than or shorter than others based on measurements.

Evidence of Learning

Formative Assessments:

- Observation
- Questioning
- Discussion
- Exit ticket
- Graphic organizer
- Self assessment
- Practice problems
- Visual representations
- Kinesthetic assessments
- Individual Whiteboard participation

Summative/Benchmark Assessment(s):

- Mid-chapter Checkpoint
- Chapter 8 Assessment

Alternative Assessments:

Resources/Materials: Second Grade Student Learning Standards: https://www.nj.gov/education/standards/math/Docs/2016NJSLS-M_Grade2.pdf Think Central Portal: https://www-k6.thinkcentral.com/ePC/start.do	**Key Vocabulary:** • ruler • yard stick • inch • feet • unit

Suggested Pacing Guide

Lesson Name/ Topic	Student Learning Objective(s)	Suggested Tasks/Activities:	Day(s) to Complete
Lesson 8.1 Measure with Inch Models	Use concrete models to measure the lengths of objects in inches.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Select appropriate tools to measure	Use different quantities of a unit of measure to make different tools that make measuring an object more accurate and efficient	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 8.8 Choose a Tool	Select appropriate tools for measuring different lengths	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice	1 day

		● Independent practice (workbook) ● Partner practice (fluency games)	
Comparing lengths	Measure to determine how much longer one object is than another	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 8.4 Measure with an Inch Ruler	Measure the lengths of objects to the nearest inch using an inch ruler.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 8.6 Measure in Inches and Feet	Measure the lengths of objects in both inches and feet to explore the inverse relationship between size and number of units.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 8.5 Add and Subtract in Inches	Solve addition and subtraction problems involving the lengths of objects by using the strategy draw a diagram.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Chapter 8 Assessment	Assess understanding of skills and concepts taught in Chapter 8	Students will be introduced to different concepts/strategies and will implement them independently. ● Assessment	1 day

Teacher Notes:

Additional Resources:
IXL second grade math skills
Read alouds:

- Super Sand Castle Saturday

Differentiation/ Modification Strategies

Students with Disabilities	English Language Learners	Gifted and Talented Students	Students at Risk	511 Students
● Consult with Case Managers and follow IEP /modifications ● Provide number line	● Assign a buddy, same language or English speaking ● Allow errors in speaking ● Rephrase questions,	● Provide extension activities ● Build on students' intrinsic motivations	● Consult with Guidance Counselors and follow I&RS procedures/ action plans	● Consult with Case Managers and follow 504 accommodations/ modifications ● Provide number line

● Provide hundreds chart ● Rephrase questions, directions, and explanations ● Allow extended time to answer question	directions, and explanations ● Allow extended time to answer questions		● Consult with classroom teacher(s) for specific behavior interventions ● Provide rewards as necessary	● Provide hundreds chart ● Rephrase questions, directions, and explanations ● Allow extended time to answer question

Unit # 9	
Overview	
Content Area: Mathematics	
Unit Title: Chapter 9: Length in Metric Units	
Grade Level: 2	
Core Ideas: In this unit, students measure and estimate lengths in metric units. Students learn how to use centimeter models and centimeter rulers to measure lengths. They apply their understanding of working with centimeters to working with meters. Students combine their understanding of measurement and estimation of lengths when they estimate lengths in meters, measure the lengths of objects both in meters and centimeters, and find the difference between the lengths of two objects.	
Standards (Content and Technology)**:**	
CPI#:	**Statement:**
Performance Expectations (NJSLS)	
2.MD.A.1	A. Measure and estimate lengths in standard units. 1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
2.MD.A.2	A. Measure and estimate lengths in standard units. 2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
2.MD.A.3	A. Measure and estimate lengths in standard units. 3. Estimate lengths using units of inches, feet, centimeters, and meters.
2.MD.A.4	A. Measure and estimate lengths in standard units. 4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
2.MD.B.5	B. Relate addition and subtraction to length. 5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
2.MD.B.6	B. Relate addition and subtraction to length. 6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.
Career Readiness (9.2), Life Literacies, and Key Skills (9.1, 9.4)	
9.4.2.CT.2	Identify possible approaches and resources to execute a plan (e.e., 1.2.2.CR1b, 8.2.2.ED.3)
Computer Science and Design Thinking (8)	
8.2.2.ITH.4	Identify how various tools reduce work and improve daily tasks.
SMP.1	Make sense of problems and persevere in solving them.
SMP.2	Reason abstractly and quantitatively.
SMP.3	Construct viable arguments and critique the reasoning of others.
SMP.4	Model with mathematics.
SMP.5	Use appropriate tools strategically.
Interdisciplinary Connection	
RL.2.10.	Read and comprehend literature, including stories and poetry, at grade level text complexity or above with scaffolding as needed.
RI.2.4.	Determine the meaning of words and phrases in a text relevant to a *grade 2 topic or subject area*.
RF.2.4.	Read with sufficient accuracy and fluency to support comprehension.
SL.2.1.	Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
L.2.3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
Cross Cultural Statements/ Mandates (Amistad, Holocaust, LGBT, SEL)	
Responsible Decision Making	Evaluate personal, ethical, safety and civic impact of decisions

Unit Essential Question(s):	**Unit Enduring Understandings:**
● How can you use centimeter models to measure length? ● How do you estimate the lengths of objects in centimeters and meters? ● How do you use an centimeter ruler to measure lengths? ● Why is measuring in meters different from measuring in centimeters? ● How do you choose a measuring tool to use when measuring lengths?	● Length is linear – iterating length units by marking the length of the unit, sliding then marking the standard unit of measure repetitively to complete the measurement. ● Identify objects that are longer than or shorter than others based on measurements.

Evidence of Learning

Formative Assessments:

- Observation
- Questioning
- Discussion
- Exit ticket
- Graphic organizer
- Self assessment
- Practice problems
- Visual representations
- Kinesthetic assessments
- Individual Whiteboard participation

Summative/Benchmark Assessment(s):

- Mid-chapter checkpoint
- Chapter 9 Assessment

Alternative Assessments:

Resources/Materials:	**Key Vocabulary:**
Second Grade Student Learning Standards: https://www.nj.gov/education/standards/math/Docs/2016NJSLS-M_Grade2.pdf Think Central Portal: https://www-k6.thinkcentral.com/ePC/start.do	● centimeter ● meter ● unit

Suggested Pacing Guide

Lesson Name/ Topic	**Student Learning Objective(s)**	**Suggested Tasks/Activities:**	**Day(s) to Complete**
Lesson 9.1 Measure with a Centimeter Model	Use a concrete model to measure the lengths of objects in centimeters.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 9.2 Estimate Lengths in Centimeters	Estimate lengths of objects in centimeters by comparing them to known lengths.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day

Lesson 9.3 Measure with a Centimeter Ruler	Measure lengths of objects to the nearest centimeter using a centimeter ruler.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 9.7 Measure and Compare Lengths	Measure and then find the difference in the lengths of two objects.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 9.4 Add and Subtract Lengths	Solve problems involving adding and subtracting lengths by using the strategy draw a diagram.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 9.5 Centimeters and Meters	Measure the lengths of objects in both centimeters and meters to explore the inverse relationship between size and number of units.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Chapter 9 Assessment	Assess understanding of skills and concepts taught in Chapter 9	Students will be introduced to different concepts/strategies and will implement them independently. ● Assessment	1 day

Teacher Notes:

Additional Resources:
IXL second grade math skills
Read alouds:

- Super Sand Castle Saturday

Differentiation/ Modification Strategies

Students with Disabilities	English Language Learners	Gifted and Talented Students	Students at Risk	512 Students
● Consult with Case Managers and follow IEP /modifications ● Provide number line ● Provide hundreds chart ● Rephrase questions,	● Assign a buddy, same language or English speaking ● Allow errors in speaking ● Rephrase questions, directions, and explanations	● Provide extension activities ● Build on students' intrinsic motivations	● Consult with Guidance Counselors and follow I&RS procedures/ action plans ● Consult with classroom teacher(s) for specific behavior interventions	● Consult with Case Managers and follow 504 accommodations/ modifications ● Provide number line ● Provide hundreds chart ● Rephrase questions,

directions, and explanations ● Allow extended time to answer question	● Allow extended time to answer questions		● Provide rewards as necessary	directions, and explanations ● Allow extended time to answer question

Unit # 10

Overview

Content Area: Mathematics

Unit Title: Chapter 10: Data

Grade Level: 2

Core Ideas: In this unit, students collect data, read, and create various graphs. Students use given information to record data in tally charts and make their own picture graphs and bar graphs. They also make sense of the data to determine how it can be used to solve problems involving addition and subtraction by answering "how many more?" and "how many fewer?" questions.

Standards (Content and Technology)**:**

CPI#:	**Statement:**
Performance Expectations (NJSLS)	
2.MD.D.10	D. Represent and interpret data. 10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.
Career Readiness (9.2), Life Literacies, and Key Skills (9.1, 9.4)	
9.4.2.IML.2	Represent data in a visual format to tell a story about the data (e.g., 2.MD.D.10)
Computer Science and Design Thinking (8)	
8.1.2.DA.1	Collect and present data, including climate change data, in various visual formats
8.1.2.DA.3	Identify and describe patterns in data visualizations
SMP.5	Use appropriate tools strategically.
SMP.6	Attend to precision.
SMP.7	Look for and make use of structure
SMP.8	Look for and express regularity in repeated reasoning.
Interdisciplinary Connection	
RL.2.10.	Read and comprehend literature, including stories and poetry, at grade level text complexity or above with scaffolding as needed.
RI.2.4.	Determine the meaning of words and phrases in a text relevant to a *grade 2 topic or subject area*.
RF.2.4.	Read with sufficient accuracy and fluency to support comprehension.
SL.2.1.	Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
L.2.3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
Cross Cultural Statements/ Mandates (Amistad, Holocaust, LGBT, SEL)	
Relationship skills	Demonstrate the ability to prevent and resolve interpersonal conflicts in constructive ways.

Unit Essential Question(s):

- How do you use a tally chart to record data from a survey?
- How do you use a picture graph to show data?
- How do you make a picture graph to show data in a tally chart?
- How is a bar graph used to show data?
- How does making a bar graph help when solving problems about data?

Unit Enduring Understandings:

- Interpret data shown in picture graphs and bar graphs.
- Display data in picture graphs and bar graphs.

Evidence of Learning

Formative Assessments:

- Observation
- Questioning
- Discussion
- Exit ticket
- Graphic organizer

- Self assessment
- Practice problems
- Visual representations
- Kinesthetic assessments
- Individual Whiteboard participation

Summative/Benchmark Assessment(s):

- Mid-chapter Checkpoint
- Chapter 10 Assessment

Alternative Assessments:

Resources/Materials:	**Key Vocabulary:**
Second Grade Student Learning Standards: **https://www.nj.gov/education/standards/math/Docs/2016NJSLS-M_Grade2.pdf** Think Central Portal: **https://www-k6.thinkcentral.com/ePC/start.do**	• data • survey • tally chart • picture graph • bar graph

Suggested Pacing Guide

Lesson Name/ Topic	**Student Learning Objective(s)**	**Suggested Tasks/Activities:**	**Day(s) to Complete**
Lesson 10.1 Collect Data	Collect data in a survey and record that data in a tally chart.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 10.2 Read Picture Graphs	Interpret data in picture graphs and use that information to solve problems.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 10.3 Make Picture Graphs	Make picture graphs to represent data.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 10.4 Read Bar Graphs	Interpret data in bar graphs	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day

Lesson 10.5 Make Bar Graphs	Make bar graphs to represent data.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 10.6 Problem Solving	Solve problems involving data by using the strategy make a graph.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Chapter 10 Review	Review understanding of skills and concepts taught in Chapter 10	Students will be introduced to different concepts/strategies and will implement them independently. ● Review	1 day
Chapter 10 Assessment	Assess understanding of skills and concepts taught in Chapter 10	Students will be introduced to different concepts/strategies and will implement them independently. ● Assessment	1 day

Teacher Notes:

Additional Resources:
IXL second grade math skills
Read alouds:
- Tally O'Malley
- The Best Vacation Ever

Differentiation/ Modification Strategies

Students with Disabilities	English Language Learners	Gifted and Talented Students	Students at Risk	513 Students
● Consult with Case Managers and follow IEP /modifications ● Provide number line ● Provide hundreds chart ● Rephrase questions, directions, and explanations ● Allow extended time to answer question	● Assign a buddy, same language or English speaking ● Allow errors in speaking ● Rephrase questions, directions, and explanations ● Allow extended time to answer questions	● Provide extension activities ● Build on students' intrinsic motivations	● Consult with Guidance Counselors and follow I&RS procedures/ action plans ● Consult with classroom teacher(s) for specific behavior interventions ● Provide rewards as necessary	● Consult with Case Managers and follow 504 accommodations/ modifications ● Provide number line ● Provide hundreds chart ● Rephrase questions, directions, and explanations ● Allow extended time to answer question

Unit # 11	
Overview	
Content Area: Mathematics	
Unit Title: Chapter 11: Geometry	
Grade Level: 2	
Core Ideas: In this unit, students extend their knowledge of two and three-dimensional shapes. They focus on specific attributes of shapes, including angles, sides, and vertices in two-dimensional shapes and faces, edges, and vertices in three-dimensional shapes. Students use their knowledge of shapes to partition various shapes into equal parts.	
Standards (Content and Technology)**:**	
CPI#:	**Statement:**
Performance Expectations (NJSLS)	
1.G.A.1	A. Reason with shapes and their attributes. 1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.5 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
1.G.A.2	A. Reason with shapes and their attributes. 2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.
1.G.A.3	A. Reason with shapes and their attributes. 3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.
Career Readiness (9.2), Life Literacies, and Key Skills (9.1, 9.4)	
9.4.2.CI.1	Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2)
Computer Science and Design Thinking (8)	
8.2.2.ED.3	Select and use appropriate tools and materials to build a product using the design process.
SMP.4	Model with mathematics.
SMP.5	Use appropriate tools strategically.
SMP.6	Attend to precision.
SMP.7	Look for and make use of structure.
SMP.8	Look for and express regularity in repeated reasoning.
Interdisciplinary Connection	
RL.2.10.	Read and comprehend literature, including stories and poetry, at grade level text complexity or above with scaffolding as needed.
RI.2.4.	Determine the meaning of words and phrases in a text relevant to a *grade 2 topic or subject area*.
RF.2.4.	Read with sufficient accuracy and fluency to support comprehension.
SL.2.1.	Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.
L.2.3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
Cross Cultural Statements/ Mandates (Amistad, Holocaust, LGBT, SEL)	
Responsible decision making	Dvelop, implement and model effective problem solving and critical thinking skills

Unit Essential Question(s):	**Unit Enduring Understandings:**
● What real-life objects match three-dimensional shapes? ● What shapes can you name just by knowing the number of sides and vertices? ● How do you find and count angles in two-dimensional shapes? ● What are halves, thirds, and fourths of a whole?	● Distinguish between defining attributes (closed figure, # of sides, # of vertices, orientation, size) ● A whole can be divided into equal parts..

Evidence of Learning

Formative Assessments:

- Observation
- Questioning
- Discussion
- Exit ticket
- Graphic organizer
- Self assessment
- Practice problems
- Visual representations
- Kinesthetic assessments
- Individual Whiteboard participation

Summative/Benchmark Assessment(s):

- Mid-chapter Checkpoint
- Chapter 11 Assessment

Alternative Assessments:

Resources/Materials:	**Key Vocabulary:**
Second Grade Student Learning Standards: https://www.nj.gov/education/standards/math/Docs/2016NJSLS-M_Grade2.pdf Think Central Portal: https://www-k6.thinkcentral.com/ePC/start.do	• three dimensional shapes & names of shapes • face • edge • vertices • 3- sided shapes • 4- sided shapes • 5- sided shapes • 6- sided shapes • two dimensional shapes & name of shapes • pattern block • tangram • circle • halves • thirds • fourths • partition

Suggested Pacing Guide

Lesson Name/ Topic	**Student Learning Objective(s)**	**Suggested Tasks/Activities:**	**Day(s) to Complete**
Lesson 11.1 Three-Dimensional Shapes	Identify three-dimensional shapes	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day
Lesson 11.2 Attributes of Three-Dimensional Shapes	Identify and describe three-dimensional shapes according to the number of faces, edges, and vertices.	Students will be introduced to different concepts/strategies and will implement them independently. • whiteboard practice • Independent practice (workbook) • Partner practice (fluency games)	1 day

Lesson 11.3 Build Three-dimensional Shapes	Build three-dimensional shapes using cubes and other objects.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 11.4 Two-dimensional Shapes	Name 3-, 4-, 5-, and 6-sided shapes according to the number of sides and vertices.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 11.5 Angels in Two-dimensional Shapes	Identify angles in two-dimensional shapes	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Mid-chapter Assessment	Assess understanding of skills and concepts taught to this point	Students will be introduced to different concepts/strategies and will implement them independently. ● Assessment	1 day
Review Two-dimensional Shapes	Build, name, and identify two-dimensional shapes	Students will be introduced to different concepts/strategies and will implement them independently. ● Exploragons ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	2 days
Lesson 11.6 Sort Two-dimensional Shapes	Sort two-dimensional shapes according to their attributes.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Compose/ Decompose Shapes	Compose/decompose two-dimensional shapes	Students will be introduced to different concepts/strategies and will implement them independently. ● Pattern blocks ● 5 piece tangram ● 7 piece tangram ● whiteboard practice ● Independent practice (workbook)	4 days

		● Partner practice (fluency games)	
Mini-assessment	Assess understanding of two-dimensional shape concepts taught	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 11.8 Equal Parts	Identify and name equal parts of circles and rectangles as halves, thirds, or fourths.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 11.9 Show Equal Parts of a Whole	Partition shapes to show halves, thirds, or fourths.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Lesson 11.10 Describe Equal Parts	Identify and describe one equal part as a half of, a third of, or a fourth of a whole.	Students will be introduced to different concepts/strategies and will implement them independently. ● whiteboard practice ● Independent practice (workbook) ● Partner practice (fluency games)	1 day
Chapter 11 Review	Review understanding of skills and concepts taught in Chapter 11	Students will be introduced to different concepts/strategies and will implement them independently. ● Review	1 day
Chapter 11 Assessment	Assess understanding of skills and concepts taught in Chapter 11	Students will be introduced to different concepts/strategies and will implement them independently. ● Assessment	1 day

Teacher Notes:

Additional Resources:
IXL second grade math skills
Read alouds:
- Captain Invincible and the Space Shapes
- Give Me Half!

Differentiation/ Modification Strategies

Students with Disabilities	English Language Learners	Gifted and Talented Students	Students at Risk	514 Students
● Consult with Case Managers	● Assign a buddy, same language or English speaking	● Provide extension activities	● Consult with Guidance Counselors and	● Consult with Case Managers and follow 504

and follow IEP /modifications ● Provide number line ● Provide hundreds chart ● Rephrase questions, directions, and explanations ● Allow extended time to answer question	● Allow errors in speaking ● Rephrase questions, directions, and explanations ● Allow extended time to answer questions	● Build on students' intrinsic motivations	follow I&RS procedures/ action plans ● Consult with classroom teacher(s) for specific behavior interventions ● Provide rewards as necessary	accommodations/ modifications ● Provide number line ● Provide hundreds chart ● Rephrase questions, directions, and explanations ● Allow extended time to answer question