

Ocean Academy Charter School
Curriculum Guide
Grade 2 - Mathematics



Original Adoption:	August 2025
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OCEAN ACADEMY CHARTER SCHOOL Mathematics Curriculum	
Content Area: Mathematics	
Course Title: Elementary Mathematics	
Grade Level: Grade 2	
Unit Plan 1: Numbers Within 20	35 Days
Unit Plan 2: Numbers Within 100	40 Days
Unit Plan 3: Numbers Within 1,000	40 Days
Unit Plan 5: Shapes and Arrays	25 Days
Unit Plan 4: Length	40 Days

OCEAN ACADEMY CHARTER SCHOOL Unit 1 Overview	
Content Area: Mathematics	
Unit Title: Numbers Within 20	Duration: 35 Days
Target Course/Grade Level: Grade 2	
Introduction/Unit Focus:	

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In this unit, students will deepen their understanding of addition and subtraction within 20 and use these operations to solve increasingly complex problems. They will explore a variety of strategies to represent and solve problems, including using fact families, counting on and back, and making a ten. Students will apply these strategies to both numerical problems and real-world contexts, including one-step and two-step word problems. They will also strengthen their ability to interpret and analyze data, using tools such as picture graphs and bar graphs to represent information and answer questions.

Building on their prior knowledge from earlier grades, students are expected to understand that addition involves joining two groups, while subtraction involves separating a group into parts. They should already be familiar with breaking apart numbers into number bonds and recognizing how models, such as number lines and bar models, represent mathematical situations. Additionally, students should be fluent in adding and subtracting one-digit numbers within 10 and have experience using strategies such as doubles, doubles plus one, counting on, counting back, and making a ten.

This unit also emphasizes the connection between different problem types: adding to, taking from, putting together, taking apart, and comparing and how these can be solved using various strategies. Students will learn to interpret word problems carefully, determine the necessary operations, and justify their thinking using models and equations. Through their work with graphs and data, students will practice interpreting tally marks, comparing quantities, and identifying "how many more" or "how many less" in a set. These foundational skills are supported by an understanding of place value, which students will use to explain and apply properties of operations in solving addition and subtraction problems efficiently and accurately.

Disciplinary Concepts for the Unit

Standard 9.1 Personal Financial Literacy

This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.

Standard 9.2 Career Awareness, Exploration, Preparation and Training

This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.

Standard 9.4 Life Literacies and Key Skills

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This standard outline key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy* that are critical for students to develop to live and work in an interconnected global economy.

Standard 8.1 Computer Science

Computer Science outlines a comprehensive set of concepts and skills, such as data and analysis, algorithms and programming, and computing systems.

Standard 8.2 Design Thinking

Technology, outlines the technological design concepts and skills essential for technological and engineering literacy. The framework design includes Engineering Design, Ethics and Culture, and the Effects of Technology on the Natural world among the disciplinary concepts

Amistad Law: N.J.S.A. 18A 52:16A-88 Every board of education shall incorporate the information regarding the contributions of African-Americans to our country in an appropriate place in the curriculum of elementary and secondary school students.

Holocaust Law: N.J.S.A. 18A:35-28 Every board of education shall include instruction on the Holocaust and genocide in an appropriate place in the curriculum of all elementary and secondary school pupils. The instruction shall further emphasize the personal responsibility that each citizen bears to fight racism and hatred whenever and wherever it happens.

Diversity and Inclusion: C.18A:35-4.36a Curriculum to include instruction on diversity and inclusion.

The instruction shall:

- (1) highlight and promote diversity, including economic diversity, equity, inclusion, tolerance, and belonging in connection with gender and sexual orientation, race and ethnicity, disabilities, and religious tolerance;
- (2) examine the impact that unconscious bias and economic disparities have at both an individual level and on society as a whole; and
- (3) encourage safe, welcoming, and inclusive environments for all students regardless of race or ethnicity, sexual and gender identities, mental and physical disabilities, and religious beliefs.

Asian Americans and Pacific Islanders (AAPI)

Ensures that the contributions, history, and heritage of Asian Americans and Pacific Islanders (AAPI) are included in the New Jersey Student Learning Standards (NJSLS) for Social Studies in kindergarten through Grade 12 (P.L.2021, c.416).

21st Century Themes and Skills

“Twenty-first century themes and skills” means themes such as global awareness; financial, economic, business, and entrepreneurial literacy; civic literacy; health literacy; learning and

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innovation skills, including creativity and innovation, critical thinking and problem solving, and communication and collaboration; information, media, and technology skills; and life and career skills, including flexibility. Career readiness, life literacies, and key skills education provides students with the necessary skills to make informed career and financial decisions, engage as responsible community members in a digital society, and to successfully meet the challenges and opportunities in an interconnected global economy.”

Content Statements

Extend students’ understanding of adding and subtracting within 20.

Standards/Learning Targets: New Jersey Student Learning Standards for Mathematics, Reading/Language Arts, Technology

Focus Standards (Major Standards) <https://www.nj.gov/education/cccs/>

Content Standards	Suggested Mathematical Practices	Critical Knowledge & Skills
2.OA.A.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. *(benchmarked)	MP.1 Make sense of problems and persevere in solving them. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): No new concept(s) introduced Students are able to: ➤ count on and put together to add to solve one- and two-step word problems. ➤ take from or take apart to subtract to solve one- and two-step word problems. ➤ use drawings and equations to represent the problem. Learning Goal 1: Add and subtract <u>within 20</u> to solve 1- and 2-step word problems with unknowns in any position.
2.OA.B.2. With accuracy and efficiency, add and subtract within 20 using mental strategies. <i>By end of Grade 2, know from memory all sums of two one-digit numbers.</i> *(benchmarked)	MP.2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): No new concept(s) introduced Students are able to: ➤ add <u>within 10</u> using mental strategies with accuracy and efficiency. ➤ subtract <u>within 10</u> using mental strategies

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		with accuracy and efficiency. Learning Goal 2: Fluently add and subtract <u>within 10</u> using mental strategies.
2.DL.B.3. 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.	MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): ➤ Generate data. Students are able to: ➤ generate measurement data by measuring lengths, to the nearest whole unit, of several objects or by making repeated measurements of the same object. ➤ record the measurements in a line plot having a horizontal scale in whole number units. Learning Goal 12: Use tools of measurement to measure lengths of several objects to the nearest whole unit and represent the data on a line plot with appropriate whole number units on the horizontal scale.
2.DL.B.4. 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.	MP.2 Reason abstractly and quantitatively. MP.5 Use appropriate tools strategically. MP.6 Attend to precision.	Concept(s): No new concept(s) introduced Students are able to: ➤ draw a picture graph to represent a data set with up to four categories. ➤ draw a bar graph to represent a data set with up to four categories. ➤ use information in a bar graph to solve

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		simple put together, take apart, and compare problems. Learning Goal 13: 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 the graph.
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New Jersey Student Learning Standards: Interdisciplinary Connections

Reading/Language Arts

RL.CR.2.1. Ask and answer questions to demonstrate understanding of key details in a literary text, referring explicitly to the text as the basis for the answers.

L.VL.2.2. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.

- A. Use sentence-level context as a clue to the meaning of a word or phrase.
- B. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/retell).
- C. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional).
- D. Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark).
- E. Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.

RI.MF.2.6. Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

W.RW.2.7. Engage in both collaborative and independent writing tasks regularly, including extended and shorter time frames.

SL.PE.2.1. Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.

- A. Follow agreed-upon norms for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
- B. Build on others' talk in conversations by linking their explicit comments to the remarks of others.

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C. Ask for clarification and further explanation as needed about the topics and texts under discussion.

SL.ES.2.3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

New Jersey Student Learning Standards: [Career Readiness, Life Literacies, and Key Skills Articulation Guide](#)

Core Ideas	Performance Expectations (Identified with Standard Number and statement)
Brainstorming can create new, innovative ideas	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). 9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem.	9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

New Jersey Student Learning Standards: [Computer Science and Design Thinking Articulation Guide](#)

Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Data can be used to make predictions about the world.	8.1.2.DA.4: Make predictions based on data using charts or graphs.
Real world information can be stored and manipulated in programs as data (e.g., numbers, words, colors, images)	8.1.2.AP.2: Model the way programs store and manipulate data by using numbers or other symbols to represent information
Complex tasks can be broken down into simpler instructions, some of which can be broken down even further.	8.1.2.AP.4: Break down a task into a sequence of steps

New Jersey Student Learning Standards: [Climate Change Mandate](#)

Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
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Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem.	9.4.2.CT.1: Gather information about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2). 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). 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)
Individuals collect, use, and display data about individuals and the world around them.	8.1.2.DA.1: Collect and present data, including climate change data, in various visual formats.

Knowledge and Skills

Unit Learning Targets (Objectives):

Students will be able to...

Content Objectives:

- Use mental math strategies such as counting on, making a ten, and doubles plus one to add two one-digit numbers efficiently.
- Subtract one-digit numbers within 20 by applying mental math strategies and understanding the inverse relationship between addition and subtraction.
- Interpret and analyze models including pictures, equations, open number lines, number bonds, and tape diagrams to represent mathematical thinking.
- Use strategies like fact families to solve one-step addition and subtraction problems and build number sense.
- Represent and solve word problems using equations and visual models.
- Collect and organize data in tally charts, tables, picture graphs, and bar graphs.
- Interpret data presented in graphs by comparing quantities and identifying totals and differences.
- Solve one-step and two-step word problems using information from graphs and equations.
- Determine and sequence the operations needed to solve two-step problems, using visual models to support reasoning.

Language Objectives:

- Write and solve equations that represent addition and subtraction word problems involving one-digit numbers.
- Draw and label open number lines, tape diagrams, and bar models to represent and solve word problems.

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- Write related addition and subtraction facts within a fact family to solve problems and explain mathematical relationships.
- Explain orally and in writing how strategies like making a ten or counting on can be used to add or subtract.
- Listen actively to others' strategies, compare them, and make connections among different approaches.
- Use mathematical vocabulary, including "fact family," "picture graph," "bar graph," and "data," during discussions.
- Create bar graphs from collected data and use them to solve addition and subtraction word problems.
- Restate the question in a word problem and describe the steps or operations needed to solve it.

Unit Enduring Understandings:

Students will know...

- Different strategies, like making a ten or using doubles plus one, can help you add and subtract.
- Understanding how addition and subtraction are related helps you solve problems.
- Organizing data into graphs helps us answer questions about the data.
- Using pictures or diagrams to model a problem can help you solve it.

Unit Essential Questions:

- How can graphs help us answer questions about data?
- How can we use the relationship between addition and subtraction to solve problems?
- How do strategies like making a ten or using doubles plus one help us add and subtract?
- How can pictures or diagrams help us solve problems?

Instructional Plan

Ready Classroom Mathematics uses a discourse-based instructional routine. Lessons are divided into Explore, Develop, and Refine sessions where students engage in a Try-Discuss-Connect routine. Small Group differentiation activities are designed to Prepare, Reteach Reinforce, or Extend the learning. Independent Learning Activities personalize instruction to all learners.

Whole Group Instruction

- Session Activities
 - Explore--Students draw on prior knowledge and make connections to new concepts
 - Develop--Students develop strategies and understanding through problem solving and discourse
 - Refine--Students deepen their understanding and strengthen their skills
- What Happens In the Classroom

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- Students make sense of problems and attempt their own representations and solution strategies.
- Hints are provided to students in the form of questions to consider as they solve each problem
- Students partner with another student to explain their thinking, representations, and solutions. Pair/Share questions in the worktexts support partner conversations.
- Students make connections between their strategies and those of their partner. They discuss similarities and differences and compare their representations, strategies, and answers
- The teacher circulates to assess student understanding and provide differentiated support. The teacher observes student thinking and student work.
- Whole group discussion allows for students to show their thinking
- Try-Discuss Connect Routine
 - Try
 - Make sense of the problem
 - Solve and support your thinking
 - Discuss
 - Share your thinking with a partner
 - Compare Strategies
 - Connect
 - Make connections and reflect on what you have learned
 - Apply your thinking to a new problem
- Resources:
 - Ready Classroom Teacher Toolkit
 - Instruction and Practice
 - Editable Powerpoint
 - Interactive Tutorial
 - Student Worktext
 - Discourse Cards
 - Digital Manipulatives
 - Math Journal
 - Lesson Vocabulary Activities
 - Unit Game
 - Exit Ticket

Small Group Differentiation

- Prepare
 - Ready Prerequisite Lessons
- Reteach
 - Tools for Instruction
- Reinforce
 - Differentiated Math Center Activities
- Extend
 - Enrichment Activities

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Independent Learning

- iReady online personalized instruction generated from iReady Diagnostic assessment
- Fluency and skills practice
- Interactive Tutorials (Lesson, Prerequisite, or Extend)
- Math Center Activities
- Additional Practice Activities
- Online Fluency Games

Mathematical Practice	Habit
Make sense of the problem and persevere in solving them	Solve problems
Reason abstractly and quantitatively	Think and reason
Construct viable arguments and critique the reasoning of others	Show and explain
Model with Mathematics	Use math in the real world
Use appropriate tools strategically	Choose a tool
Attend to precision	Be clear and precise
Look for and make use of structure	Zoom in and out
Look for and express regularity in repeated reasoning	Use patterns

Evidence of Student Learning

Formative Assessments:

- Teacher Observation
- Games
- Performance Assessment
- Anecdotal Records
- Exit Slips
- Oral Assessment/Conferencing
- Portfolios/Journals
- Daily Classwork
- Pre-Assessment

Summative Assessments

- Unit Tests
- Quizzes
- Writing Samples

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Benchmark Assessments:

- Unit Assessments
- Benchmark Assessments
- IReady Diagnostic Assessment

Alternative Assessments

- Portfolio review
- Anecdotal Notes

Performance Tasks:

- Project Based Learning Activity
- Math In Action
- Performance Task

Suggested Options for Differentiation and Modifications

Special Education

- Follow all IEP modifications.
 - Use visuals, manipulatives, and graphic supports.
 - Pre-teach and review key vocabulary.
 - Provide summaries, word banks, and visual glossaries.
 - Use small-group instruction.
 - Offer peer tutoring or a “buddy.”
 - Read aloud directions; use choral reading, chants, or songs when appropriate.
 - Provide preferential seating.
 - Allow extra time on tasks.
 - Accept oral or dictated responses.
 - Shorten or modify assignments/questions.
 - Use large-print, Braille, or digital text with audio options.
 - Provide scribes or augmentative communication systems as needed.
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Students with 504 Plans

- Follow the 504 plan.
 - Provide extra time on assignments/tests.
 - Offer small-group settings.
 - Accept oral or dictated responses.
 - Use large-print, Braille, or digital text.
 - Provide a scribe or communication device if needed.
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Students at Risk of School Failure

- Use visuals and hands-on supports.

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- Pre-teach key vocabulary and concepts.
 - Provide small-group instruction.
 - Read aloud directions and model steps.
 - Use peer tutoring or a supportive “buddy.”
 - Offer chants, songs, and repetition for reinforcement.
 - Provide preferential seating.
-

Gifted and Talented

- Ask open-ended and higher-order questions.
 - Encourage problem-solving, discovery, and creativity.
 - Provide extension activities based on interests.
 - Offer advanced or leveled materials.
 - Use flexible grouping by ability or interest.
 - Include enrichment centers, puzzles, or concept maps.
 - Provide choice in assignments.
 - Incorporate problem-solving simulations.
 - Debrief to reflect on learning.
-

Multilingual Learners

- Collaborate with ESL/MLL specialists.
 - Provide small-group instruction.
 - Pre-teach vocabulary; label classroom items.
 - Use visuals, gestures, and picture supports.
 - Pair words with movements or objects.
 - Provide sentence and speaking frames.
 - Allow oral responses and extended time.
 - Use audio books or recorded directions.
-

Diversity and Inclusion

- Respect and include cultural traditions.
- Involve families in learning.
- Provide alternative assignments if needed.
- Use visuals and clear, simple language.
- Collaborate with language and support staff.
- Maintain a nurturing, structured environment.
- Avoid slang; speak slowly and clearly.

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- Build positive connections with parents and caregivers.

Supplemental Resources

- Instructional Materials
 - Ready Math Textbook
 - Ready Math Learning Path
 - Fluency Flight
 - Ready Math Learning Games
 - Fluency and Skills Practice
- Supplemental Materials
 - Base Ten Blocks
 - Math Sleeves
 - Cubes
 - Ready Math Leveled Center Activities
 - Math Sleeves with Workmats
 - Clocks
 - Plastic Coins
 - Number Lines
 - 100-120 Chart
 - Measuring Tools
 - Counters
- Intervention Materials
 - Reteach Materials
 - Tools for Instruction

OCEAN ACADEMY CHARTER SCHOOL

Unit 2 Overview

Content Area: Mathematics

Unit Title: Numbers Within 100

Duration: 40 Days

Target Course/Grade Level: Grade 2

Introduction/Unit Focus:

In this unit, students will strengthen and expand their understanding of place value and apply it to solve addition and subtraction problems within 100. They will explore strategies that involve adding tens and ones, regrouping ones to make a ten, and decomposing tens to subtract. Students will also build fluency and flexibility with numbers as they solve both one-step and two-step word problems that involve real-world contexts, including money.

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Students will apply their knowledge of the structure of numbers to make sense of the operations they perform. A strong emphasis is placed on using place value understanding and the properties of operations to find efficient ways to add and subtract. They will learn to use models such as base-ten blocks, number lines, and equations to represent problems and justify their reasoning. These skills will support students in solving problems that require more than one step, including those that involve interpreting and calculating with dollar bills and coins.

In addition to working with numbers, students will extend their understanding of time. They will learn to tell and write time to the nearest five minutes using both analog and digital clocks, as well as use their understanding of skip counting and the concept of half to support time-telling skills. Students will connect this work to real-life experiences, such as reading schedules or solving problems that involve elapsed time.

To be successful in this unit, students should have a solid foundation in understanding place value in two-digit numbers, fluency in adding and subtracting within 20, and familiarity with using strategies such as counting by tens and using fact families. Prior experiences with solving word problems involving one-digit numbers, telling time to the hour and half hour, and understanding addition and subtraction as joining, separating, and comparing quantities will also support their learning. This unit brings together these essential skills, preparing students to apply their mathematical understanding in more complex and meaningful ways.

Disciplinary Concepts for the Unit

Standard 9.1 Personal Financial Literacy

This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.

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Content Statements

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Standards/Learning Targets: New Jersey Student Learning Standards for Mathematics, Reading/Language Arts, Technology		
Focus Standards (Major Standards) https://www.nj.gov/education/cccs/		
Content Standards	Suggested Mathematical Practices	Critical Knowledge & Skills
2.NBT.B.5. With accuracy and efficiency, add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. *(benchmarked)	SMPs 1, 2, 3, 4, 5 and 6 are integrated in every lesson through the <i>Try-Discuss-Connect</i> routine. In addition, this lesson particularly emphasizes the following SMPs: MP.5 Use appropriate tools strategically. MP.7 Look for and make use of structure.	Concept(s): No new concept(s) introduced Students are able to: ➤ with accuracy and efficiency, add and subtract <u>within 50</u> using strategies based on place value. ➤ with accuracy and efficiency, add and subtract <u>within 50</u> using strategies based on properties of operations. ➤ with accuracy and efficiency, add and subtract <u>within 50</u> using strategies based on the relationship between addition and subtraction. Learning Goal 5: Use a variety of strategies (place value, properties of operation, and/or the relationship between addition and subtraction) to add and subtract within 50.
2.NBT.B.9. Explain why addition and subtraction strategies work, using place value and the properties of operations.	SMPs 1, 2, 3, 4, 5 and 6 are integrated in every lesson through the <i>Try-Discuss-Connect</i> routine. In addition, this lesson particularly emphasizes the following SMPs: MP.4 Model with mathematics. MP.5 Use appropriate tools strategically.	Concept(s): No new concept(s) introduced Students are able to: ➤ Explain, using objects and drawings, why addition and subtraction strategies based on place value work. ➤ Explain, using objects and drawings, why addition and subtraction strategies based on

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	MP.7 Look for and make use of structure.	properties of operations work. Learning Goal 9: After applying addition and subtraction strategies based on place value and the properties of operations, explain why these strategies work using drawings or objects [for example, $37 + 12$ equals $30 + 7 + 10 + 2$ (place value) which equals $30 + 10 + 7 + 2$ (property of operations)].
2.OA.A.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. *(benchmarked)	SMPs 1, 2, 3, 4, 5 and 6 are integrated in every lesson through the <i>Try-Discuss-Connect</i> routine. In addition, this lesson particularly emphasizes the following SMPs: MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): No new concept(s) introduced Students are able to: ➤ count on and put together to add to solve one- and two-step word problems. ➤ take from or take apart to subtract to solve one- and two-step word problems. ➤ use drawings and equations to represent the problem. Learning Goal 1: Add and subtract <u>within 20</u> to solve 1- and 2-step word problems with unknowns in any position.
2.M.C.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. <i>Example: If you have 2 dimes and 3 pennies, how many cents do you have?</i>	SMPs 1, 2, 3, 4, 5 and 6 are integrated in every lesson through the <i>Try-Discuss-Connect</i> routine. In addition, this lesson particularly emphasizes the following SMPs: MP.4 Model with mathematics.	Concept(s): ➤ Know the value of dollar bills, quarters, dimes, nickels, and pennies. Students are able to: ➤ identify dollar bills, quarters, dimes, nickels, and pennies. ➤ using dollar bills, quarters, dimes, nickels,

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	MP.5 Use appropriate tools strategically. MP.7 Look for and make use of structure.	and pennies, count to determine the total amount of money. ➤ solve word problems involving dollar bills, quarters, dimes, nickels, and pennies. Learning Goal 3: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using the \$ and ¢ symbols appropriately.
2.M.C.7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	SMPs 1, 2, 3, 4, 5 and 6 are integrated in every lesson through the <i>Try-Discuss-Connect</i> routine. In addition, this lesson particularly emphasizes the following SMPs: MP.5 Use appropriate tools strategically. MP.6 Attend to precision.	Concept(s): No new concept(s) introduced Students are able to: ➤ use analog and digital clocks, tell time to the nearest five minutes using a.m. and p.m. ➤ use analog and digital clocks, write time to the nearest five minutes using a.m. and p.m. Learning Goal 8: Tell and write time using analog and digital clocks to the nearest five minutes using a.m. and p.m.

**New Jersey Student Learning Standards: Interdisciplinary Connections
(Reading/Language Arts and Technology)**

Reading/Language Arts

RL.CR.2.1. Ask and answer questions to demonstrate understanding of key details in a literary text, referring explicitly to the text as the basis for the answers.

L.VL.2.2. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.

- F. Use sentence-level context as a clue to the meaning of a word or phrase.
- G. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/retell).
- H. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional).
- I. Use knowledge of the meaning of individual words to predict the meaning of compound

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- words (e.g., birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark).
- J. Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.

RI.MF.2.6. Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

W.RW.2.7. Engage in both collaborative and independent writing tasks regularly, including extended and shorter time frames.

SL.PE.2.1. Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.

- D. Follow agreed-upon norms for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
- E. Build on others' talk in conversations by linking their explicit comments to the remarks of others.
- F. Ask for clarification and further explanation as needed about the topics and texts under discussion.

SL.ES.2.3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

New Jersey Student Learning Standards: [Career Readiness, Life Literacies, and Key Skills Articulation Guide](#)

Core Ideas	Performance Expectations (Identified with Standard Number and statement)
Money comes in different values, forms, and uses.	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).
Saving money is a habit that can be developed.	9.1.2.PB.2: Explain why an individual would choose to save money.
Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem.	9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

New Jersey Student Learning Standards: [Computer Science and Design Thinking Articulation Guide](#)

Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Complex tasks can be broken down into simpler instructions, some of which	8.1.2.AP.4: Break down a task into a sequence of steps

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can be broken down even further.	
Human needs and desires determine which new tools are developed	8.2.2.ITH.2: Explain the purpose of a product and its value.

New Jersey Student Learning Standards: [Climate Change Mandate](#)

Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem.	9.4.2.CT.1: Gather information about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2). 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). 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)
Digital tools have a purpose.	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).

Knowledge and Skills

Unit Learning Targets (Objectives):

Students will be able to...

Content Objectives:

- Break apart two-digit numbers into tens and ones as a strategy for solving addition and subtraction problems using place value understanding.
- Add two-digit numbers by combining tens with tens and ones with ones, and identify when regrouping is needed to compose a new ten.
- Subtract by decomposing a ten, and recognize when it is necessary to do so based on the values in the ones place.
- Use addition to solve subtraction problems and to check subtraction results.
- Apply mental math and place value strategies to fluently add and subtract within 100, with and without regrouping.
- Analyze word problems involving two-digit numbers to determine whether to add or subtract, and choose appropriate strategies to solve them.
- Use fact families and related equations as strategies to solve one-step problems and build understanding of number relationships.
- Interpret and use visual models such as base-ten blocks, open number lines, and quick drawings to represent addition and subtraction with two-digit numbers.

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- Recognize and name coins including pennies, nickels, dimes, and quarters, and understand the value of each coin and paper bill.
- Count a collection of coins and bills to determine the total amount of money.

Language Objectives:

- Record sums and differences using base-ten models, open number lines, and quick drawings to represent the reasoning behind a strategy.
- Write addition and subtraction equations to represent and solve word problems involving two-digit numbers.
- Explain how addition can be used to solve subtraction problems and describe why a particular strategy works.
- Orally describe strategies used to solve problems, including regrouping tens or decomposing a ten, and compare different methods shared by peers.
- Talk with a partner about strategies and explain how models or equations represent a problem.
- Write and discuss equations that represent fact families and apply them to real-world contexts.
- Use mathematical vocabulary when describing coin names, values, and amounts of money.

Unit Enduring Understandings:

Students will know...

- Knowing how to use tens and ones helps us add numbers by place value.
- Breaking numbers apart to the nearest ten can make addition and subtraction easier.
- Models help us represent word problems, and creating a good model helps us solve one- or two-step problems.
- Skip-counting by fives can help us tell time to the nearest 5 minutes.

Unit Essential Questions:

- Why is understanding place value important?
- How can breaking numbers apart help solve addition and subtraction problems?
- How can explaining my thinking help me understand a problem better?
- How do I choose the best strategy to solve a problem?
- How can I use patterns to show a relationship?

Instructional Plan

Ready Classroom Mathematics uses a discourse-based instructional routine. Lessons are divided into Explore, Develop, and Refine sessions where students engage in a Try-Discuss-Connect routine. Small Group differentiation activities are designed to Prepare, Reteach Reinforce, or Extend the learning. Independent Learning Activities personalize instruction to all learners.

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Whole Group Instruction

- Session Activities
 - Explore--Students draw on prior knowledge and make connections to new concepts
 - Develop--Students develop strategies and understanding through problem solving and discourse
 - Refine--Students deepen their understanding and strengthen their skills
- What Happens In the Classroom
 - Students make sense of problems and attempt their own representations and solution strategies.
 - Hints are provided to students in the form of questions to consider as they solve each problem
 - Students partner with another student to explain their thinking, representations, and solutions. Pair/Share questions in the worktexts support partner conversations.
 - Students make connections between their strategies and those of their partner. They discuss similarities and differences and compare their representations, strategies, and answers
 - The teacher circulates to assess student understanding and provide differentiated support. The teacher observes student thinking and student work.
 - Whole group discussion allows for students to show their thinking
- Resources:
 - Ready Classroom Teacher Toolkit
 - Try-Discuss Connect Routine
 - Try
 - Make sense of the problem
 - Solve and support your thinking
 - Discuss
 - Share your thinking with a partner
 - Compare Strategies
 - Connect
 - Make connections and reflect on what you have learned
 - Apply your thinking to a new problem
 - Instruction and Practice
 - Editable Powerpoint
 - Interactive Tutorial
 - Student Worktext
 - Discourse Cards
 - Digital Manipulatives
 - Math Journal
 - Lesson Vocabulary Activities
 - Unit Game
 - Exit Ticket

Small Group Differentiation

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- Prepare
 - Ready Prerequisite Lessons
- Reteach
 - Tools for Instruction
- Reinforce
 - Differentiated Math Center Activities
- Extend
 - Enrichment Activities

Independent Learning

- iReady online personalized instruction generated from iReady Diagnostic assessment
- Fluency and skills practice
- Interactive Tutorials (Lesson, Prerequisite, or Extend)
- Math Center Activities
- Additional Practice Activities
- Online Fluency Games

Mathematical Practice	Habit
Make sense of the problem and persevere in solving them	Solve problems
Reason abstractly and quantitatively	Think and reason
Construct viable arguments and critique the reasoning of others	Show and explain
Model with Mathematics	Use math in the real world
Use appropriate tools strategically	Choose a tool
Attend to precision	Be clear and precise
Look for and make use of structure	Zoom in and out
Look for and express regularity in repeated reasoning	Use patterns

Evidence of Student Learning

Formative Assessments:

- Teacher Observation
- Games
- Performance Assessment
- Anecdotal Records
- Exit Slips

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- Oral Assessment/Conferencing
- Portfolios/ Journals
- Daily Classwork
- Pre-Assessment

Summative Assessments

- Unit Tests
- Quizzes
- Writing Samples

Benchmark Assessments:

- Unit Assessments
- Benchmark Assessments
- iReady Diagnostic Assessments

Alternative Assessments

- Portfolio review
- Anecdotal Notes

Performance Tasks:

- Project Based Learning Activity
- Math In Action
- Performance Task

Suggested Options for Differentiation and Modifications

Special Education

- Follow all IEP modifications.
- Use visuals, manipulatives, and graphic supports.
- Pre-teach and review key vocabulary.
- Provide summaries, word banks, and visual glossaries.
- Use small-group instruction.
- Offer peer tutoring or a “buddy.”
- Read aloud directions; use choral reading, chants, or songs when appropriate.
- Provide preferential seating.
- Allow extra time on tasks.
- Accept oral or dictated responses.
- Shorten or modify assignments/questions.
- Use large-print, Braille, or digital text with audio options.
- Provide scribes or augmentative communication systems as needed.

Students with 504 Plans

- Follow the 504 plan.

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- Provide extra time on assignments/tests.
 - Offer small-group settings.
 - Accept oral or dictated responses.
 - Use large-print, Braille, or digital text.
 - Provide a scribe or communication device if needed.
-

Students at Risk of School Failure

- Use visuals and hands-on supports.
 - Pre-teach key vocabulary and concepts.
 - Provide small-group instruction.
 - Read aloud directions and model steps.
 - Use peer tutoring or a supportive “buddy.”
 - Offer chants, songs, and repetition for reinforcement.
 - Provide preferential seating.
-

Gifted and Talented

- Ask open-ended and higher-order questions.
 - Encourage problem-solving, discovery, and creativity.
 - Provide extension activities based on interests.
 - Offer advanced or leveled materials.
 - Use flexible grouping by ability or interest.
 - Include enrichment centers, puzzles, or concept maps.
 - Provide choice in assignments.
 - Incorporate problem-solving simulations.
 - Debrief to reflect on learning.
-

Multilingual Learners

- Collaborate with ESL/MLL specialists.
 - Provide small-group instruction.
 - Pre-teach vocabulary; label classroom items.
 - Use visuals, gestures, and picture supports.
 - Pair words with movements or objects.
 - Provide sentence and speaking frames.
 - Allow oral responses and extended time.
 - Use audio books or recorded directions.
-

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Diversity and Inclusion

- Respect and include cultural traditions.
- Involve families in learning.
- Provide alternative assignments if needed.
- Use visuals and clear, simple language.
- Collaborate with language and support staff.
- Maintain a nurturing, structured environment.
- Avoid slang; speak slowly and clearly.
- Build positive connections with parents and caregivers.

Supplemental Resources

- Instructional Materials
 - Ready Math Textbook
 - Ready Math Learning Path
 - Fluency Flight
 - Ready Math Learning Games
 - Fluency and Skills Practice
- Supplemental Materials
 - Base Ten Blocks
 - Math Sleeves
 - Cubes
 - Ready Math Leveled Center Activities
 - Math Sleeves with Workmats
 - Clocks
 - Plastic Coins
 - Number Lines
 - 100-120 Chart
 - Measuring Tools
 - Counters
- Intervention Materials
 - Reteach Materials
 - Tools for Instruction

OCEAN ACADEMY CHARTER SCHOOL
Unit 3 Overview

Content Area: Mathematics

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Unit Title: Numbers within 1,000	Duration: 40 Days
Target Course/Grade Level: Grade 2	
Introduction/Unit Focus: In this unit, students will deepen their understanding of place value as they work with numbers up to 1,000. They will learn to read, write, and build three-digit numbers in a variety of ways, using models and number forms to represent hundreds, tens, and ones. Through this exploration, students will also compare three-digit numbers, using their knowledge of place value to determine which is greater or less, and to explain how digits in different places affect a number's overall value. A major focus of this unit is using place value understanding and the properties of operations to solve addition and subtraction problems. Students will extend their skills to add and subtract within 1,000, including adding 10 or 100 to a number and using strategies to add and subtract three-digit numbers. They will apply different strategies such as regrouping, using expanded form, or breaking numbers apart to solve problems efficiently. Students will also explore how to add more than two two-digit numbers, reinforcing their flexibility with number combinations and mental math. Throughout the unit, students will engage in meaningful problem solving that connects to real-world situations. They will model problems with drawings, manipulatives, and equations, and explain their thinking using appropriate mathematical language. As they represent and solve increasingly complex problems, students will build the skills needed to work fluently and flexibly with larger numbers. To be successful in this unit, students should already be comfortable counting to 100 and by tens and hundreds. They should have a solid understanding of place value in two-digit numbers and be able to add and subtract two-digit numbers fluently, with and without regrouping. Familiarity with modeling numbers, recognizing the value of digits in different places, and using addition facts will support students in extending their understanding to three-digit numbers. This unit serves as a critical bridge from foundational number sense to more complex computation and reasoning.	
Disciplinary Concepts for the Unit Standard 9.1 Personal Financial Literacy This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers. Standard 9.2 Career Awareness, Exploration, Preparation and Training This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.	

Standard 9.4 Life Literacies and Key Skills

This standard outline key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy* that are critical for students to develop to live and work in an interconnected global economy.

Standard 8.1 Computer Science

Computer Science outlines a comprehensive set of concepts and skills, such as data and analysis, algorithms and programming, and computing systems.

Standard 8.2 Design Thinking

Technology, outlines the technological design concepts and skills essential for technological and engineering literacy. The framework design includes Engineering Design, Ethics and Culture, and the Effects of Technology on the Natural world among the disciplinary concepts

Amistad Law: N.J.S.A. 18A 52:16A-88 Every board of education shall incorporate the information regarding the contributions of African-Americans to our country in an appropriate place in the curriculum of elementary and secondary school students.

Holocaust Law: N.J.S.A. 18A:35-28 Every board of education shall include instruction on the Holocaust and genocide in an appropriate place in the curriculum of all elementary and secondary school pupils. The instruction shall further emphasize the personal responsibility that each citizen bears to fight racism and hatred whenever and wherever it happens.

Diversity and Inclusion: C.18A:35-4.36a Curriculum to include instruction on diversity and inclusion.

The instruction shall:

- (1) highlight and promote diversity, including economic diversity, equity, inclusion, tolerance, and belonging in connection with gender and sexual orientation, race and ethnicity, disabilities, and religious tolerance;
- (2) examine the impact that unconscious bias and economic disparities have at both an individual level and on society as a whole; and
- (3) encourage safe, welcoming, and inclusive environments for all students regardless of race or ethnicity, sexual and gender identities, mental and physical disabilities, and religious beliefs.

Asian Americans and Pacific Islanders (AAPI)

Ensures that the contributions, history, and heritage of Asian Americans and Pacific Islanders (AAPI) are included in the New Jersey Student Learning Standards (NJSLs) for Social Studies in kindergarten through Grade 12 (P.L.2021, c.416).

21st Century Themes and Skills

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“Twenty-first century themes and skills” means themes such as global awareness; financial, economic, business, and entrepreneurial literacy; civic literacy; health literacy; learning and innovation skills, including creativity and innovation, critical thinking and problem solving, and communication and collaboration; information, media, and technology skills; and life and career skills, including flexibility. Career readiness, life literacies, and key skills education provides students with the necessary skills to make informed career and financial decisions, engage as responsible community members in a digital society, and to successfully meet the challenges and opportunities in an interconnected global economy.”

Content Statements

Introduce students to place value and operations with numbers within 1,000.

Standards/Learning Targets: New Jersey Student Learning Standards for Mathematics,
Reading/Language Arts, Technology

Focus Standards (Major Standards) <https://www.nj.gov/education/cccs/>

Content Standards	Suggested Mathematical Practices	Critical Knowledge & Skills
2.NBT.A.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.1.a. 100 can be thought of as a bundle of ten tens – called a “hundred.” 2.NBT.A.1.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).	MP.1 Make sense of problems and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.7 Look for and make use of structure.	Concept(s): ➤ 100 can be thought of as a bundle of ten tens – called a <i>hundred</i>. ➤ 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 <i>tens</i> and 0 <i>ones</i>). Students are able to: ➤ represent 100 as a bundle of ten <i>tens</i>. ➤ represent the number of <i>hundreds</i>, <i>tens</i>, and <i>ones</i> in a 3-digit number. Learning Goal 3: Represent a 3-digit number as specific amounts of <i>hundreds</i>, <i>tens</i>, and <i>ones</i>. Learning Goal 4: Identify ten <i>tens</i> as 100 and represent two

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		hundred, three hundred, ... nine hundred with 2, 3, ..., 9 hundred bundles (with zero <i>tens</i> and zero <i>ones</i>).
2.NBT.A.2. Count within 1000; skip-count by 5s, 10s, and 100s. *(benchmarked)	MP.1 Make sense of problems and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others. MP.5 Use appropriate tools strategically. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): No new concept(s) introduced Students are able to: ➤ count by fives within 1000. ➤ count by tens within 1000. ➤ count by hundreds within 1000. Learning Goal 5: Skip count by 5s and 10s up to 100...beginning at any multiple of 5.
2.NBT.A.3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	MP.1 Make sense of problems and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): No new concept(s) introduced Students are able to: ➤ count by fives within 1000. ➤ count by tens within 1000. ➤ count by hundreds within 1000. Learning Goal 5: Skip count by 5s and 10s up to 100...beginning at any multiple of 5.
2.NBT.A.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.	MP.1 Make sense of problems and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.7 Look for and make use of structure.	Concept(s): ➤ Place value Students are able to: ➤ use the number of the hundreds, tens and/or ones digits to compare two three-digit numbers. ➤ write the results of the comparison using $>$, $=$, or $<$.

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		Learning Goal 8: Use symbols $>$, $=$, $<$ to record the results of comparing two 3-digit numbers by decomposing the number into a number (100s, 10s, and 1s).
2.NBT.B.6. Add up to four two-digit numbers using strategies based on place value and properties of operations.	MP.1 Make sense of problems and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others. MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): No new concept(s) introduced Students are able to: ➤ add three two digit numbers using place value strategies and properties of operations. ➤ add four two digit numbers using place value strategies and properties of operations. Learning Goal 6: Add up to four two -digit numbers using strategies based on place value and properties of operations.
2.NBT.B.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	MP.1 Make sense of problems and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.7 Look for and make use of structure.	Concept(s): ➤ In adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones. ➤ Sometimes it is necessary to compose or decompose tens or hundreds. Students are able to:

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necessary to compose or decompose tens or hundreds.		➤ add and subtract within 1000, using concrete models or drawings. ➤ add and subtract within 1000 using strategies based on place value. ➤ add and subtract within 1000 using properties of operations or the relationship between addition and subtraction. ➤ relate the strategies to a written method.
2.NBT.B.8. Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.	MP.1 Make sense of problems and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others. MP.5 Use appropriate tools strategically. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): ➤ Place value Students are able to: ➤ Mentally add 10 or 100 from any given number between 100 and 900. ➤ Mentally subtract 10 or 100 from any given number between 100 and 900. Learning Goal 9: Mentally add or subtract 10 or 100 from any given number between 100 and 900.
2.NBT.B.9. Explain why addition and subtraction strategies work, using place value and the properties of operations.	MP.1 Make sense of problems and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.6 Attend to precision.	Concept(s): No new concept(s) introduced Students are able to: ➤ Explain, using objects and drawings, why addition and subtraction strategies based on place value work.

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	MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	➤ Explain, using objects and drawings, why addition and subtraction strategies based on properties of operations work. Learning Goal 9: After applying addition and subtraction strategies based on place value and the properties of operations, explain why these strategies work using drawings or objects [for example, $37 + 12$ equals $30 + 7 + 10 + 2$ (place value) which equals $30 + 10 + 7 + 2$ (property of operations)].
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New Jersey Student Learning Standards: Interdisciplinary Connections

Reading/Language Arts

RL.CR.2.1. Ask and answer questions to demonstrate understanding of key details in a literary text, referring explicitly to the text as the basis for the answers.

L.VL.2.2. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.

- K. Use sentence-level context as a clue to the meaning of a word or phrase.
- L. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/retell).
- M. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional).
- N. Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark).
- O. Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.

RI.MF.2.6. Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

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W.RW.2.7. Engage in both collaborative and independent writing tasks regularly, including extended and shorter time frames.

SL.PE.2.1. Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.

- G. Follow agreed-upon norms for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
- H. Build on others' talk in conversations by linking their explicit comments to the remarks of others.
- I. Ask for clarification and further explanation as needed about the topics and texts under discussion.

SL.ES.2.3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

New Jersey Student Learning Standards: [Career Readiness, Life Literacies, and Key Skills Articulation Guide](#)

Core Ideas	Performance Expectations (Identified with Standard Number and statement)
Brainstorming can create new, innovative ideas	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). 9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem.	9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
Brainstorming can create new, innovative ideas	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). 9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).

New Jersey Student Learning Standards: [Computer Science and Design Thinking Articulation Guide](#)

Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Data can be used to make predictions about the world.	8.1.2.DA.4: Make predictions based on data using charts or graphs.
Real world information can be stored and manipulated in programs as data (e.g., numbers, words, colors,	8.1.2.AP.2: Model the way programs store and manipulate data by using numbers or other symbols to represent information

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images)	
Complex tasks can be broken down into simpler instructions, some of which can be broken down even further.	8.1.2.AP.4: Break down a task into a sequence of steps

New Jersey Student Learning Standards: Climate Change Mandate

Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem.	9.4.2.CT.1: Gather information about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2). 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). 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)

Knowledge and Skills

Unit Learning Targets (Objectives):

Students will be able to...

- Identify and describe the place value of digits in a three-digit number, including the number of ones, tens, and hundreds.
 - Interpret and model three-digit numbers using base-ten blocks and express them in different combinations of hundreds, tens, and ones.
 - Read and write three-digit numbers in standard and expanded form and relate them to base-ten models.
 - Compare three-digit numbers by evaluating their place values, using models and symbols to represent greater than, less than, or equal to relationships.
 - Use skip-counting patterns by fives, tens, and hundreds to add and subtract, including from two- and three-digit numbers.
 - Mentally add or subtract 10 or 100 to and from any number between 100 and 900.
 - Break apart three-digit numbers as a place-value strategy to solve addition and subtraction problems, determining when regrouping is needed.
 - Carry out regrouping of ones, tens, or hundreds when necessary to solve addition and subtraction problems fluently.
 - Subtract from three-digit numbers, including cases where zeros appear in the ones and/or tens places.
 - Use addition to check subtraction work for accuracy.
- Develop strategies for adding three or more numbers, using place value and the properties of addition (commutative and associative) to group numbers efficiently.

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- Apply understanding of number structure and relationships to solve word problems and represent them using equations and models.

Language Objectives:

- Tell how many hundreds, tens, and ones are in a given three-digit number and describe different combinations that represent the same number.
- Read and write three-digit numbers aloud and in expanded notation.
- Write numbers represented by base-ten models and use place-value charts to show understanding.
- Write and explain inequalities using comparison symbols ($>$ and $<$) to compare three-digit numbers.
- Ask and answer questions to clarify understanding when comparing or evaluating place-value models.
- Describe skip-counting patterns and explain their usefulness in real-life situations or problem-solving contexts.
- Use mathematical language to describe regrouping during addition and subtraction, and explain why regrouping is needed in specific problems.
- Draw and label place-value charts and open number lines to model strategies used for solving problems.
- Write and explain equations for word problems and justify strategies used to find sums and differences.
- Describe and compare mental math strategies, including grouping numbers to simplify the addition of three or more numbers.
- Justify conclusions in discussions and clearly communicate reasoning to others using appropriate mathematical vocabulary.

Unit Enduring Understandings:

Students will know...

- The value of a digit in a number depends on its place in that number.
- Understanding place value helps you read, write, and compare numbers.
- Knowing place value lets you mentally add or subtract 10 or 100 from a number.
- Place value helps you break apart numbers as a strategy for adding or subtracting.

Unit Essential Questions:

- How do you use place value to read, write, and compare numbers?
- How can identifying patterns in similar problems help me solve them more efficiently?
- How are different mathematical operations related to each other?
- When and why do we use proportional comparisons in math?

Instructional Plan

Ready Classroom Mathematics uses a discourse-based instructional routine. Lessons are divided into Explore, Develop, and Refine sessions where students engage in a Try-Discuss-Connect routine. Small Group differentiation activities are designed to Prepare,

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Reteach Reinforce, or Extend the learning. Independent Learning Activities personalize instruction to all learners.

Whole Group Instruction

- Session Activities
 - Explore--Students draw on prior knowledge and make connections to new concepts
 - Develop--Students develop strategies and understanding through problem solving and discourse
 - Refine--Students deepen their understanding and strengthen their skills
- What Happens In the Classroom
 - Students make sense of problems and attempt their own representations and solution strategies.
 - Hints are provided to students in the form of questions to consider as they solve each problem
 - Students partner with another student to explain their thinking, representations, and solutions. Pair/Share questions in the worktexts support partner conversations.
 - Students make connections between their strategies and those of their partner. They discuss similarities and differences and compare their representations, strategies, and answers
 - The teacher circulates to assess student understanding and provide differentiated support. The teacher observes student thinking and student work.
 - Whole group discussion allows for students to show their thinking
- Try-Discuss Connect Routine
 - Try
 - Make sense of the problem
 - Solve and support your thinking
 - Discuss
 - Share your thinking with a partner
 - Compare Strategies
 - Connect
 - Make connections and reflect on what you have learned
 - Apply your thinking to a new problem
- Resources:
 - Ready Classroom Teacher Toolkit
 - Instruction and Practice
 - Editable Powerpoint
 - Interactive Tutorial
 - Student Worktext
 - Discourse Cards
 - Digital Manipulatives
 - Math Journal
 - Lesson Vocabulary Activities
 - Unit Game
 - Exit Ticket

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Small Group Differentiation

- Prepare
 - Ready Prerequisite Lessons
- Reteach
 - Tools for Instruction
- Reinforce
 - Differentiated Math Center Activities
- Extend
 - Enrichment Activities

Independent Learning

- iReady online personalized instruction generated from iReady Diagnostic assessment
- Fluency and skills practice
- Interactive Tutorials (Lesson, Prerequisite, or Extend)
- Math Center Activities
- Additional Practice Activities
- Online Fluency Games

Mathematical Practice	Habit
Make sense of the problem and persevere in solving them	Solve problems
Reason abstractly and quantitatively	Think and reason
Construct viable arguments and critique the reasoning of others	Show and explain
Model with Mathematics	Use math in the real world
Use appropriate tools strategically	Choose a tool
Attend to precision	Be clear and precise
Look for and make use of structure	Zoom in and out
Look for and express regularity in repeated reasoning	Use patterns

Evidence of Student Learning

Formative Assessments:

- Teacher Observation

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- Games
- Performance Assessment
- Anecdotal Records
- Exit Slips
- Oral Assessment/Conferencing
- Portfolios/Journals
- Daily Classwork
- Pre-Assessment

Summative Assessments

- Unit Tests
- Quizzes
- Writing Samples

Benchmark Assessments:

- Unit Assessments
- Benchmark Assessments
- iReady Diagnostic Assessments

Alternative Assessments

- Portfolio review
- Anecdotal Notes

Performance Tasks:

- Project Based Learning Activity
- Math In Action
- Performance Task

Suggested Options for Differentiation and Modifications

Special Education

- Follow all IEP modifications.
- Use visuals, manipulatives, and graphic supports.
- Pre-teach and review key vocabulary.
- Provide summaries, word banks, and visual glossaries.
- Use small-group instruction.
- Offer peer tutoring or a “buddy.”
- Read aloud directions; use choral reading, chants, or songs when appropriate.
- Provide preferential seating.
- Allow extra time on tasks.
- Accept oral or dictated responses.
- Shorten or modify assignments/questions.
- Use large-print, Braille, or digital text with audio options.
- Provide scribes or augmentative communication systems as needed.

Students with 504 Plans

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- Follow the 504 plan.
 - Provide extra time on assignments/tests.
 - Offer small-group settings.
 - Accept oral or dictated responses.
 - Use large-print, Braille, or digital text.
 - Provide a scribe or communication device if needed.
-

Students at Risk of School Failure

- Use visuals and hands-on supports.
 - Pre-teach key vocabulary and concepts.
 - Provide small-group instruction.
 - Read aloud directions and model steps.
 - Use peer tutoring or a supportive “buddy.”
 - Offer chants, songs, and repetition for reinforcement.
 - Provide preferential seating.
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Gifted and Talented

- Ask open-ended and higher-order questions.
 - Encourage problem-solving, discovery, and creativity.
 - Provide extension activities based on interests.
 - Offer advanced or leveled materials.
 - Use flexible grouping by ability or interest.
 - Include enrichment centers, puzzles, or concept maps.
 - Provide choice in assignments.
 - Incorporate problem-solving simulations.
 - Debrief to reflect on learning.
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Multilingual Learners

- Collaborate with ESL/MLL specialists.
- Provide small-group instruction.
- Pre-teach vocabulary; label classroom items.
- Use visuals, gestures, and picture supports.
- Pair words with movements or objects.
- Provide sentence and speaking frames.
- Allow oral responses and extended time.
- Use audio books or recorded directions.

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Diversity and Inclusion

- Respect and include cultural traditions.
- Involve families in learning.
- Provide alternative assignments if needed.
- Use visuals and clear, simple language.
- Collaborate with language and support staff.
- Maintain a nurturing, structured environment.
- Avoid slang; speak slowly and clearly.
- Build positive connections with parents and caregivers.

Supplemental Resources

- Instructional Materials
 - Ready Math Textbook
 - Ready Math Learning Path
 - Fluency Flight
 - Ready Math Learning Games
 - Fluency and Skills Practice
- Supplemental Materials
 - Base Ten Blocks
 - Math Sleeves
 - Cubes
 - Ready Math Leveled Center Activities
 - Math Sleeves with Workmats
 - Clocks
 - Plastic Coins
 - Number Lines
 - 100-120 Chart
 - Measuring Tools
 - Counters
- Intervention Materials
 - Reteach Materials
 - Tools for Instruction

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Unit Title: Shapes and Arrays	Duration: 25 Days Represent and interpret data
Target Course/Grade Level: Grade 2	
Introduction/Unit Focus: In this unit, students will explore geometry and foundational concepts for multiplication through hands-on activities and reasoning tasks. They will work with a variety of two-dimensional shapes, learning to recognize, draw, and describe shapes based on their attributes, such as sides and angles. Students will investigate how shapes can be broken into equal parts and begin to understand concepts of partitioning as they divide circles and rectangles into halves, thirds, and fourths. They will also learn to compose new shapes using familiar ones and reason about the relationships between shapes and their components. A key focus of this unit is developing an early understanding of multiplication by working with equal groups of objects. Students will use arrays to represent repeated addition and learn how rows and columns can be used to count objects efficiently. They will apply these strategies to identify even and odd numbers and to write addition equations that represent equal groups. This work lays the groundwork for formal multiplication in later grades by helping students visualize and understand grouping and repeated addition. Students will also build their spatial reasoning by tiling rectangles with squares and counting to find the total number of tiles needed. These activities strengthen students' understanding of area and introduce basic measurement skills in a visual and concrete way. To be successful in this unit, students should be able to identify and name basic shapes such as triangles, circles, squares, and rectangles, and recognize their sides and angles. They should also be familiar with sorting objects by attributes and identifying equal parts of a whole. A foundational understanding of equal groups, skip counting by twos and fives, and the ability to write simple addition equations will support students as they begin to model multiplication situations. Additionally, knowing basic addition facts and how to add three one-digit numbers will help them fluently find totals within arrays. This unit builds essential skills for future work in both geometry and operations.	
Disciplinary Concepts for the Unit	
Standard 9.1 Personal Financial Literacy This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.	

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Standard 9.2 Career Awareness, Exploration, Preparation and Training

This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.

Standard 9.4 Life Literacies and Key Skills

This standard outline key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy* that are critical for students to develop to live and work in an interconnected global economy.

Standard 8.1 Computer Science

Computer Science outlines a comprehensive set of concepts and skills, such as data and analysis, algorithms and programming, and computing systems.

Standard 8.2 Design Thinking

Technology, outlines the technological design concepts and skills essential for technological and engineering literacy. The framework design includes Engineering Design, Ethics and Culture, and the Effects of Technology on the Natural world among the disciplinary concepts

Amistad Law: N.J.S.A. 18A 52:16A-88 Every board of education shall incorporate the information regarding the contributions of African-Americans to our country in an appropriate place in the curriculum of elementary and secondary school students.

Holocaust Law: N.J.S.A. 18A:35-28 Every board of education shall include instruction on the Holocaust and genocide in an appropriate place in the curriculum of all elementary and secondary school pupils. The instruction shall further emphasize the personal responsibility that each citizen bears to fight racism and hatred whenever and wherever it happens.

Diversity and Inclusion: C.18A:35-4.36a Curriculum to include instruction on diversity and inclusion.

The instruction shall:

- (1) highlight and promote diversity, including economic diversity, equity, inclusion, tolerance, and belonging in connection with gender and sexual orientation, race and ethnicity, disabilities, and religious tolerance;
- (2) examine the impact that unconscious bias and economic disparities have at both an individual level and on society as a whole; and
- (3) encourage safe, welcoming, and inclusive environments for all students regardless of race or ethnicity, sexual and gender identities, mental and physical disabilities, and religious beliefs.

Asian Americans and Pacific Islanders (AAPI)

Ensures that the contributions, history, and heritage of Asian Americans and Pacific Islanders

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(AAPL) are included in the New Jersey Student Learning Standards (NJSLS) for Social Studies in kindergarten through Grade 12 (P.L.2021, c.416).

21st Century Themes and Skills

“Twenty-first century themes and skills” means themes such as global awareness; financial, economic, business, and entrepreneurial literacy; civic literacy; health literacy; learning and innovation skills, including creativity and innovation, critical thinking and problem solving, and communication and collaboration; information, media, and technology skills; and life and career skills, including flexibility. Career readiness, life literacies, and key skills education provides students with the necessary skills to make informed career and financial decisions, engage as responsible community members in a digital society, and to successfully meet the challenges and opportunities in an interconnected global economy.”

Content Statements

Extends students’ understanding of shapes and arrays.

Standards/Learning Targets: New Jersey Student Learning Standards for Mathematics, Reading/Language Arts, Technology

Focus Standards (Major Standards) <https://www.nj.gov/education/cccs/>

Content Standards	Suggested Mathematical Practices	Critical Knowledge & Skills
2.G.A.1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	MP.1 Make sense of problems and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.7 Look for and make sense of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): No new concept(s) introduced Students are able to: ➤ draw shapes having specified attributes (e.g. number of equal faces, number of angles) ➤ identify triangles, quadrilaterals, pentagons, hexagons, and cubes. Learning Goal 1: Draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
2.G.A.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	MP.1 Make sense of problems and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others.	Concept(s): ➤ Equal shares of identical wholes need not have the same shape. Students are able to:

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whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. For example, students partition a rectangle (i.e., the whole) into three equal shares, identify each of the shares as a 'third' and describe the rectangle as three 'thirds'.	MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.7 Look for and make sure of structure.	➤ partition rectangles into two, three, or four equal shares. ➤ partition two same-sized rectangles to show that equal shares of identical wholes need not have the same shape. ➤ describe the shares using the words halves, thirds, fourths, half of, a third of, a fourth of, etc. ➤ recognize and then describe the whole as two halves, three thirds, four fourths. Learning Goal 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, and four fourths.
2.OA.C.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	MP.1 Make sense of problems and persevere in solving them. MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.7 Look for and make sure of structure.	Concept(s): ➤ Even: groups having even numbers of objects will pair up evenly. ➤ Odd: groups having odd numbers of objects will not pair up evenly. Students are able to: ➤ pair up to 20 objects, count by 2s and determine whether the group contains an even or odd number of objects. ➤ write an equation to express an even number as a sum of two equal addends. Learning Goal 3: Write an equation to express an even number as a sum of two equal addends.

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2.OA.C.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.	MP.1 Make sense of problems and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.7 Look for and make sure of structure.	Concept(s): ➤ Arrays as arrangements of objects. Students are able to: ➤ with objects arranged in an array, use repeated addition to find the total. ➤ with objects arranged in an array, write an equation to express repeated addition. Learning Goal 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.
New Jersey Student Learning Standards: Interdisciplinary Connections (Reading/Language Arts and Technology)		
Reading/Language Arts RL.CR.2.1. Ask and answer questions to demonstrate understanding of key details in a literary text, referring explicitly to the text as the basis for the answers. L.VL.2.2. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. P. Use sentence-level context as a clue to the meaning of a word or phrase. Q. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/retell). R. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional). S. Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark). T. Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases. RI.MF.2.6. Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text. W.RW.2.7. Engage in both collaborative and independent writing tasks regularly, including extended and shorter time frames. SL.PE.2.1. Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.		

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- J. Follow agreed-upon norms for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
- K. Build on others' talk in conversations by linking their explicit comments to the remarks of others.
- L. Ask for clarification and further explanation as needed about the topics and texts under discussion.

SL.ES.2.3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

New Jersey Student Learning Standards: [Career Readiness, Life Literacies, and Key Skills Articulation Guide](#)

Core Ideas	Performance Expectations (Identified with Standard Number and statement)
Brainstorming can create new, innovative ideas	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). 9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem.	9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

New Jersey Student Learning Standards: [Computer Science and Design Thinking Articulation Guide](#)

Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Complex tasks can be broken down into simpler instructions, some of which can be broken down even further.	8.1.2.AP.4: Break down a task into a sequence of steps
Digital artifacts can be owned by individuals or organizations.	9.4.2.DC.1: Explain differences between ownership and sharing of information.

New Jersey Student Learning Standards: [Climate Change Mandate](#)

Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
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Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem.	9.4.2.CT.1: Gather information about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2). 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). 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)
Data can be used to make predictions about the world.	8.1.2.DA.3: Identify and describe patterns in data visualizations. 8.1.2.DA.4: Make predictions based on data using charts or graphs

Knowledge and Skills

Unit Learning Targets (Objectives):

Students will be able to...

Content Objectives:

- Identify and describe two-dimensional shapes—including triangles, quadrilaterals, pentagons, and hexagons—by analyzing their number of sides and angles.
- Recognize and describe cubes based on the number and shape of their faces.
- Distinguish between different shapes by identifying defining attributes, and draw shapes that meet given criteria.
- Understand and name equal parts of shapes, including halves, thirds, and fourths, and recognize that fractional parts must be equal in size.
- Demonstrate that as a whole is divided into more parts, each part becomes smaller in size.
- Analyze a rectangle partitioned into squares, identifying arrays made of equal-sized squares with no gaps or overlaps.
- Count and determine the number of squares used to tile a rectangle and create arrays to fit a rectangular area.
- Describe and analyze rectangular arrays of up to 5 rows and 5 columns, using skip-counting or repeated addition to determine the total number of objects.
- Write equations to represent the total number of objects in an array.
- Identify odd and even numbers by recognizing number patterns, including relationships to doubles and doubles +1 facts.
- Use skip-counting by twos to identify even numbers and understand patterns in number structure.

Language Objectives:

- Write the names of shapes based on the number of sides and angles, and draw shapes that reflect these attributes accurately.

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- Draw cubes and explain their characteristics using correct mathematical vocabulary.
- Divide shapes into halves, thirds, and fourths, and draw lines to represent equal parts in different ways.
- Label fractional parts using appropriate terms like half, third, and fourth.
- Describe how many equal-sized squares are used to fill a rectangle, and draw lines to create rows and columns of same-sized squares.
- Identify and describe the rows, columns, and total number of objects in an array using complete sentences.
- Tell whether a number is odd or even, and draw pictures to visually show the difference.
- Count aloud by twos and name even numbers in sequence.

Unit Enduring Understandings:

Students will know...

- The number of sides and angles a shape has helps us identify it.
- We can divide shapes into equal parts to show halves, thirds, and fourths.
- An array is a way to organize objects in equal rows and columns.
- Knowing how to skip-count and add helps us find the total number of objects in an array.

Unit Essential Questions:

- How do the number of sides and angles help us identify shapes?
- How can we divide shapes into equal parts using what we already know?
- How can we use addition and skip-counting to understand multiplication?

Instructional Plan

Ready Classroom Mathematics uses a discourse-based instructional routine. Lessons are divided into Explore, Develop, and Refine sessions where students engage in a Try-Discuss-Connect routine. Small Group differentiation activities are designed to Prepare, Reteach Reinforce, or Extend the learning. Independent Learning Activities personalize instruction to all learners.

Whole Group Instruction

- Session Activities
 - Explore--Students draw on prior knowledge and make connections to new concepts
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 - Students make sense of problems and attempt their own representations and solution strategies.
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- Students partner with another student to explain their thinking, representations, and solutions. Pair/Share questions in the worktexts support partner conversations.
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- The teacher circulates to assess student understanding and provide differentiated support. The teacher observes student thinking and student work.
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- Interactive Tutorials (Lesson, Prerequisite, or Extend)
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- Writing Samples

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- Unit Assessments
- Benchmark Assessments

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- iReady Diagnostic Assessments

Alternative Assessments

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- Anecdotal Notes

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 - Pre-teach and review key vocabulary.
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- Use peer tutoring or a supportive “buddy.”
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- Instructional Materials
 - Ready Math Textbook
 - Ready Math Learning Path
 - Fluency Flight
 - Ready Math Learning Games
 - Fluency and Skills Practice
- Supplemental Materials
 - Base Ten Blocks
 - Math Sleeves
 - Cubes
 - Ready Math Leveled Center Activities
 - Math Sleeves with Workmats
 - Clocks
 - Plastic Coins
 - Number Lines
 - 100-120 Chart
 - Measuring Tools
 - Counters
- Intervention Materials
 - Reteach Materials
 - Tools for Instruction

OCEAN ACADEMY CHARTER SCHOOL	
Unit 4 Overview	
Content Area: Mathematics	
Unit Title: Length	Duration: 40 Days
Target Course/Grade Level: Grade 2	
Introduction/Unit Focus: In this unit, students will deepen their understanding of measurement by learning to measure and estimate lengths using standard units. They will gain experience using tools such as rulers, yardsticks, meter sticks, and measuring tapes to determine the length of objects in both customary and metric units. Students will explore how the same object can be measured with different units, and how the choice of unit affects the measurement. As they develop these skills, they will also learn to select appropriate tools and units for various measuring tasks, and to estimate lengths before measuring to build number sense and familiarity with standard units.	

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A key component of this unit is the connection between measurement and operations. Students will solve problems involving the addition and subtraction of lengths, using strategies such as number lines and equations to represent and reason through their solutions. They will compare the lengths of two or more objects and determine how much longer or shorter one is than another. These comparisons provide a natural context for applying their understanding of addition and subtraction in meaningful ways. Students will also represent measurement data using line plots, which helps them analyze and interpret information about lengths and develop early data literacy skills.

To prepare for this work, students should have a foundational understanding of nonstandard measurement and familiarity with using standard units such as inches and centimeters. They should be able to count fluently from zero, measure to the nearest inch or centimeter, and understand how different units compare. Prior experience with addition and subtraction within 20 and 100, as well as a basic understanding of fact families and number line models, will support their problem-solving strategies throughout the unit. Students will build on these foundational skills to reason about measurement, represent and solve problems involving length, and make mathematical connections between operations, data, and spatial thinking.

Disciplinary Concepts for the Unit

Standard 9.1 Personal Financial Literacy

This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.

Standard 9.2 Career Awareness, Exploration, Preparation and Training

This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.

Standard 9.4 Life Literacies and Key Skills

This standard outline key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy* that are critical for students to develop to live and work in an interconnected global economy.

Standard 8.1 Computer Science

Computer Science outlines a comprehensive set of concepts and skills, such as data and analysis, algorithms and programming, and computing systems.

Standard 8.2 Design Thinking

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Technology, outlines the technological design concepts and skills essential for technological and engineering literacy. The framework design includes Engineering Design, Ethics and Culture, and the Effects of Technology on the Natural world among the disciplinary concepts

Amistad Law: N.J.S.A. 18A 52:16A-88 Every board of education shall incorporate the information regarding the contributions of African-Americans to our country in an appropriate place in the curriculum of elementary and secondary school students.

Holocaust Law: N.J.S.A. 18A:35-28 Every board of education shall include instruction on the Holocaust and genocide in an appropriate place in the curriculum of all elementary and secondary school pupils. The instruction shall further emphasize the personal responsibility that each citizen bears to fight racism and hatred whenever and wherever it happens.

Diversity and Inclusion: C.18A:35-4.36a Curriculum to include instruction on diversity and inclusion.

The instruction shall:

- (1) highlight and promote diversity, including economic diversity, equity, inclusion, tolerance, and belonging in connection with gender and sexual orientation, race and ethnicity, disabilities, and religious tolerance;
- (2) examine the impact that unconscious bias and economic disparities have at both an individual level and on society as a whole; and
- (3) encourage safe, welcoming, and inclusive environments for all students regardless of race or ethnicity, sexual and gender identities, mental and physical disabilities, and religious beliefs.

Asian Americans and Pacific Islanders (AAPI)

Ensures that the contributions, history, and heritage of Asian Americans and Pacific Islanders (AAPI) are included in the New Jersey Student Learning Standards (NJSLs) for Social Studies in kindergarten through Grade 12 (P.L.2021, c.416).

21st Century Themes and Skills

“Twenty-first century themes and skills” means themes such as global awareness; financial, economic, business, and entrepreneurial literacy; civic literacy; health literacy; learning and innovation skills, including creativity and innovation, critical thinking and problem solving, and communication and collaboration; information, media, and technology skills; and life and career skills, including flexibility. Career readiness, life literacies, and key skills education provides students with the necessary skills to make informed career and financial decisions, engage as responsible community members in a digital society, and to successfully meet the challenges and opportunities in an interconnected global economy.”

Content Statements

Extends students’ understanding of measuring length.

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Standards/Learning Targets: New Jersey Student Learning Standards for Mathematics, Reading/Language Arts, Technology		
Focus Standards (Major Standards) https://www.nj.gov/education/cccs/		
Content Standards	Suggested Mathematical Practices	Critical Knowledge & Skills
2.M.A.1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	MP.1 Make sense of problems and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.7 Look for and make sure of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): No new concept(s) introduced Students are able to: ➤ measure lengths of objects using rules, yardsticks, meter sticks and measuring tapes. Learning Goal 4: Estimate lengths of objects and measure lengths of objects using appropriate tools.
2.M.A.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.	MP.1 Make sense of problems and persevere in solving them. MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.7 Look for and make sure of structure.	Concept(s): No new concept(s) introduced Students are able to: ➤ measure the length of an object using different units of measure. ➤ compare the measurements and explain how they relate to each unit. Learning Goal 5: Compare measurements of an object taken with two different units of measure and describe how the two measurements relate to the size of the unit chosen.
2.M.A.3. Estimate lengths using units of inches, feet, centimeters, and meters	MP.1 Make sense of problems and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others.	Concept(s): No new concept(s) introduced Students are able to: ➤ estimate lengths of objects.

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	MP.5 Use appropriate tools strategically. MP.6 Attend to precision.	Learning Goal 6: Estimate lengths of objects and measure lengths of objects using appropriate tools.
2.M.A.4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	MP.1 Make sense of problems and persevere in solving them. MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.6 Attend to precision.	Concept(s): No new concept(s) introduced Students are able to: ➤ Measure objects, comparing to determine how much longer one object is than another. ➤ Express the difference in length in terms of a standard unit of measure. Learning Goal 7: Compare lengths of two objects and determine how much longer one object is than the other using a standard unit of measure.
2.M.B.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	MP.1 Make sense of problems and persevere in solving them. MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.7 Look for and make sure of structure.	Concept(s): No new concept(s) introduced Students are able to: ➤ add and subtract, within 100, to solve word problems involving lengths (lengths are given in the same units). ➤ use drawings to represent the problem. ➤ use number sentences with a symbol for the unknown to represent the problem.

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		Learning Goal 8: Add and subtract within 100 to solve word problems involving lengths using a symbol to represent the unknown number.
2.M.B.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.	MP.1 Make sense of problems and persevere in solving them. MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.7 Look for and make sure of structure.	Concept(s): No new concept(s) introduced Students are able to: ➤ use equally spaced points of a number line to represent whole numbers as lengths from 0. ➤ represent whole number sums within 100 on a number line diagram. ➤ represent whole number differences within 100 on a number line diagram. Learning Goal 9: Use a number line to represent the solution of whole number sums and differences related to length within 100.
2.DL.B.3 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.	MP.1 Make sense of problems and persevere in solving them. MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.6 Attend to precision.	Concept(s): ➤ Generate data. Students are able to: ➤ generate measurement data by measuring lengths, to the nearest whole unit, of several objects or by making repeated measurements of the same object.

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		➤ record the measurements in a line plot having a horizontal scale in whole number units. Learning Goal 12: Use tools of measurement to measure lengths of several objects to the nearest whole unit and represent the data on a line plot with appropriate whole number units on the horizontal scale.
New Jersey Student Learning Standards: Interdisciplinary Connections		
Reading/Language Arts RL.CR.2.1. Ask and answer questions to demonstrate understanding of key details in a literary text, referring explicitly to the text as the basis for the answers. L.VL.2.2. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. U. Use sentence-level context as a clue to the meaning of a word or phrase. V. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/retell). W. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional). X. Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark). Y. Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases. RI.MF.2.6. Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text. W.RW.2.7. Engage in both collaborative and independent writing tasks regularly, including extended and shorter time frames. SL.PE.2.1. Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.		

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- M. Follow agreed-upon norms for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
- N. Build on others' talk in conversations by linking their explicit comments to the remarks of others.
- O. Ask for clarification and further explanation as needed about the topics and texts under discussion.

SL.ES.2.3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

New Jersey Student Learning Standards: [Career Readiness, Life Literacies, and Key Skills Articulation Guide](#)

Core Ideas	Performance Expectations (Identified with Standard Number and statement)
Brainstorming can create new, innovative ideas	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). 9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem.	9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

New Jersey Student Learning Standards: [Computer Science and Design Thinking Articulation Guide](#)

Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Complex tasks can be broken down into simpler instructions, some of which can be broken down even further.	8.1.2.AP.4: Break down a task into a sequence of steps

New Jersey Student Learning Standards: [Climate Change Mandate](#)

Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem.	9.4.2.CT.1: Gather information about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2). 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). 9.4.2.CT.3: Use a variety of types of thinking to solve

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	problems (e.g., inductive, deductive)
Data can be used to make predictions about the world.	8.1.2.DA.3: Identify and describe patterns in data visualizations. 8.1.2.DA.4: Make predictions based on data using charts or graphs.

Knowledge and Skills

Unit Learning Targets (Objectives):

Students will be able to...

Content Objectives:

- Understand that objects can be measured using different standard units such as inches, centimeters, feet, and meters, and recognize that the length measurement depends on the size of the unit used.
- Represent and measure the length of objects using appropriate tools including rulers, yardsticks, meter sticks, and measuring tapes.
- Compare measuring the same object using different units and describe how the number of units changes depending on unit size.
- Choose the appropriate tool based on the object's length and the context of the measurement.
- Use measurement tools accurately, beginning at the zero mark, and repeat measurement with a ruler if needed.
- Explore and describe the relationships between different measurement units, including inches and feet, feet and yards, and centimeters and meters.
- Estimate the length of objects in inches, centimeters, feet, and meters using benchmarks.
- Compare the lengths of two or more objects, including when they are not side by side, and use addition or subtraction to determine how much longer or shorter one object is than another.
- Solve word problems involving addition and subtraction of lengths, ensuring that all lengths are in the same unit before solving.
- Interpret and use visual models such as bar models and number lines to represent and solve problems about length.
- Represent whole numbers and operations on a number line, including solving word problems by showing jumps for addition and subtraction.
- Interpret marks on a line plot as data points and understand that the numbers on a ruler or number line can represent a given length.
- Represent data accurately on a line plot by labeling the number line and using appropriate marks to display data.

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Language Objectives:

- Describe how to use standard tools like rulers and meter sticks by aligning one end of the object with the zero mark and identifying the endpoint for measurement.
- Explain the difference between measurement units such as inches and centimeters and describe the advantages of using one unit over another in different contexts.
- Record measurements accurately using inches, feet, centimeters, and meters.
- Justify the choice of measuring tools for specific objects and communicate the reasoning clearly.
- Compare and explain length measurements in different units and predict which unit will result in a greater or lesser numeric measurement.
- Use academic language such as “estimate,” “unit,” “greater than,” and “less than” to describe lengths and comparisons.
- Restate essential details from a measurement word problem and describe the steps taken to solve it.
- Draw and explain bar models and number line representations to support addition and subtraction in measurement contexts.
- Discuss and compare strategies with a partner, explaining how conclusions were reached, particularly strategies used to solve addition or subtraction problems on a number line.
- Describe how the number line on a line plot is similar to a ruler and label the number line with numbers to represent given data accurately.
- Explain what each mark or “X” on a line plot represents, using precise language to communicate data interpretation.

Unit Enduring Understandings:

Students will know...

- Different tools and units can be used to measure length. Understanding measurement helps us estimate and compare lengths.
- We can use addition or subtraction to find the difference between the lengths of objects.

Unit Essential Questions:

- Why do we need to measure things?
- How does what we are measuring affect how we measure?
- How can we use estimation in everyday life?

Instructional Plan

Ready Classroom Mathematics uses a discourse-based instructional routine. Lessons are divided into Explore, Develop, and Refine sessions where students engage in a Try-Discuss-Connect routine. Small Group differentiation activities are designed to Prepare, Reteach Reinforce, or Extend the learning. Independent Learning Activities personalize instruction to all learners.

Whole Group Instruction

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- Session Activities
 - Explore--Students draw on prior knowledge and make connections to new concepts
 - Develop--Students develop strategies and understanding through problem solving and discourse
 - Refine--Students deepen their understanding and strengthen their skills
- What Happens In the Classroom
 - Students make sense of problems and attempt their own representations and solution strategies.
 - Hints are provided to students in the form of questions to consider as they solve each problem
 - Students partner with another student to explain their thinking, representations, and solutions. Pair/Share questions in the worktexts support partner conversations.
 - Students make connections between their strategies and those of their partner. They discuss similarities and differences and compare their representations, strategies, and answers
 - The teacher circulates to assess student understanding and provide differentiated support. The teacher observes student thinking and student work.
 - Whole group discussion allows for students to show their thinking
- Try-Discuss Connect Routine
 - Try
 - Make sense of the problem
 - Solve and support your thinking
 - Discuss
 - Share your thinking with a partner
 - Compare Strategies
 - Connect
 - Make connections and reflect on what you have learned
 - Apply your thinking to a new problem
- Resources:
 - Ready Classroom Teacher Toolkit
 - Instruction and Practice
 - Editable Powerpoint
 - Interactive Tutorial
 - Student Worktext
 - Discourse Cards
 - Digital Manipulatives
 - Math Journal
 - Lesson Vocabulary Activities
 - Unit Game
 - Exit Ticket

Small Group Differentiation

- Prepare

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- Ready Prerequisite Lessons
- Reteach
 - Tools for Instruction
- Reinforce
 - Differentiated Math Center Activities
- Extend
 - Enrichment Activities

Independent Learning

- iReady online personalized instruction generated from iReady Diagnostic assessment
- Fluency and skills practice
- Interactive Tutorials (Lesson, Prerequisite, or Extend)
- Math Center Activities
- Additional Practice Activities
- Online Fluency Games

Mathematical Practice	Habit
Make sense of the problem and persevere in solving them	Solve problems
Reason abstractly and quantitatively	Think and reason
Construct viable arguments and critique the reasoning of others	Show and explain
Model with Mathematics	Use math in the real world
Use appropriate tools strategically	Choose a tool
Attend to precision	Be clear and precise
Look for and make use of structure	Zoom in and out
Look for and express regularity in repeated reasoning	Use patterns

Evidence of Student Learning

Formative Assessments:

- Teacher Observation
- Games
- Performance Assessment
- Anecdotal Records
- Exit Slips
- Oral Assessment/Conferencing

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- Portfolios/Journals
- Daily Classwork
- Pre-Assessment

Summative Assessments

- Unit Tests
- Quizzes
- Writing Samples

Benchmark Assessments:

- Unit Assessments
- Benchmark Assessments
- iReady Diagnostic Assessments

Alternative Assessments

- Portfolio review
- Anecdotal Notes

Performance Tasks:

- Project Based Learning Activity
- Math In Action
- Performance Task

Suggested Options for Differentiation and Modifications

Special Education

- Follow all IEP modifications.
- Use visuals, manipulatives, and graphic supports.
- Pre-teach and review key vocabulary.
- Provide summaries, word banks, and visual glossaries.
- Use small-group instruction.
- Offer peer tutoring or a “buddy.”
- Read aloud directions; use choral reading, chants, or songs when appropriate.
- Provide preferential seating.
- Allow extra time on tasks.
- Accept oral or dictated responses.
- Shorten or modify assignments/questions.
- Use large-print, Braille, or digital text with audio options.
- Provide scribes or augmentative communication systems as needed.

Students with 504 Plans

- Follow the 504 plan.
- Provide extra time on assignments/tests.
- Offer small-group settings.
- Accept oral or dictated responses.
- Use large-print, Braille, or digital text.

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- Provide a scribe or communication device if needed.
-

Students at Risk of School Failure

- Use visuals and hands-on supports.
 - Pre-teach key vocabulary and concepts.
 - Provide small-group instruction.
 - Read aloud directions and model steps.
 - Use peer tutoring or a supportive “buddy.”
 - Offer chants, songs, and repetition for reinforcement.
 - Provide preferential seating.
-

Gifted and Talented

- Ask open-ended and higher-order questions.
 - Encourage problem-solving, discovery, and creativity.
 - Provide extension activities based on interests.
 - Offer advanced or leveled materials.
 - Use flexible grouping by ability or interest.
 - Include enrichment centers, puzzles, or concept maps.
 - Provide choice in assignments.
 - Incorporate problem-solving simulations.
 - Debrief to reflect on learning.
-

Multilingual Learners

- Collaborate with ESL/MLL specialists.
 - Provide small-group instruction.
 - Pre-teach vocabulary; label classroom items.
 - Use visuals, gestures, and picture supports.
 - Pair words with movements or objects.
 - Provide sentence and speaking frames.
 - Allow oral responses and extended time.
 - Use audio books or recorded directions.
-

Diversity and Inclusion

- Respect and include cultural traditions.

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- Involve families in learning.
- Provide alternative assignments if needed.
- Use visuals and clear, simple language.
- Collaborate with language and support staff.
- Maintain a nurturing, structured environment.
- Avoid slang; speak slowly and clearly.
- Build positive connections with parents and caregivers.

Supplemental Resources

- Instructional Materials
 - Ready Math Textbook
 - Ready Math Learning Path
 - Fluency Flight
 - Ready Math Learning Games
 - Fluency and Skills Practice
- Supplemental Materials
 - Base Ten Blocks
 - Math Sleeves
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