Ocean Academy Charter School
Curriculum Guide
Grade 1 - Mathematics

Original Adoption:	August 2025
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OCEAN ACADEMY CHARTER SCHOOL Mathematics Curriculum	
Content Area: Mathematics	
Course Title: Mathematics	
Grade Level: Grade 1	
Unit Title	**Pacing Guide in Days**
Trimester 1	
Unit 1: Relating Addition and Subtraction	30 days
Unit 2: Addition and Subtraction within 20	30 days
Trimester 2:	
Unit 3: Solving Word Problems and Make Comparisons	30 days
Unit 4: Using Tens and Ones to Organize and Count	30 days
Trimester 3:	
Unit 5: Operations with Tens and Ones	30 days
Unit 6: Geometry and Measurement	30 days

OCEAN ACADEMY CHARTER SCHOOL Unit 1 Overview
Content Area: Mathematics

Ocean Academy Charter School
Curriculum Guide
Grade 1 - Mathematics

Unit Title: Relating Addition and Subtraction (Trimester 1)	**Duration:** 30 Days
Target Course/Grade Level: Grade 1	

Introduction/Unit Focus:

This unit introduces students to addition and subtraction within 10, focusing on developing their understanding of how numbers can be composed and decomposed to make calculations easier. Students will learn to find missing number partners that make 10 and use strategies such as counting on to add and counting back to subtract. They will also explore the relationship between addition and subtraction by using addition to solve subtraction problems. Throughout the unit, students will practice solving word problems involving numbers up to 10 and use appropriate math vocabulary to describe addition and subtraction concepts.

Before beginning this unit, students should be able to rote count to 100 by ones and be familiar with tools such as 5-frames and 10-frames to organize and count objects. They should also have experience counting to find the total when sets of objects are joined or separated. These foundational skills will support their understanding of addition and subtraction within 10 as they engage with the unit content.

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

“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.”

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

Content Standards: New Jersey Student Learning Standards for Mathematics	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills

1.0A.A.1. Represent and solve problems involving addition and subtraction. 1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, 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.4 Model with mathematics MP.5 Use appropriate tools strategically MP.6 Attend to precision	Concept(s): ➢ Symbols (unknowns) can be in any position. Students are able to: ➢ add, using objects and drawings, to solve word problems involving situations of adding to and putting together. ➢ subtract, using objects and drawings, to solve world problems involving situations of taking from and taking apart. Learning Goal 1: Use addition and subtraction within 10 to solve problems, including word problems involving situations of adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions.
1.0A.B.3 Apply properties of operations as strategies to add and subtract. 3 Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.) {Students need not use formal	MP.4 Model with mathematics MP.5 Use appropriate tools strategically MP.7 Look for and make use of structures MP.8 Look for and express regularity in repeated reasoning	Concept(s): ➢ Knowing 4 + 3 means that 3 + 4 is also known (commutative property/fact families). ➢ When adding , the numbers need not be added in any particular order. Students are able to: ➢ add and subtract, within 10, using properties of operations as strategies (commutative property).

terms for these properties}		Learning Goal 2: Apply properties of operations (commutative property) as strategies to add or subtract within 10.
1.0A.B.4 Understand subtraction as an unknown-addend problem. For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.	MP.5 Use appropriate tools strategically MP.8 Look for and express regularity in repeated reasoning	Concept(s): ➢ Subtraction can be represented as an unknown-addend problem. ➢ Finding 9 minus 3 means solving ? + 3 = 9 or 3 + ? = 9 (fact families). Students are able to: ➢ represent subtraction as an unknown addend problem. ➢ solve subtraction problems, within 10, using unknown addends. Learning Goal 3: Solve subtraction problems, within 10, by representing subtraction as an unknown addend problem and finding the unknown addend
1.0A.C.5 Relate counting to addition and subtraction	MP.2 Reason abstractly and quantitatively MP.5 Use appropriate tools strategically MP.6 Attend to precision MP.7 Look for and make use of structures	Concepts ➢ Counting can be used to add and subtract. Students are able to: ➢ Count on to add ➢ Count back to subtract Learning Goal 3: Count on to add and count backwards to subtract to solve addition and subtraction problems within 10.
1.0A.C.6 Add and subtract within 20, demonstrating accuracy and efficiency for addition and	MP.4 Model with mathematics MP.5 Use appropriate tools strategically	Concept(s): ➢ Different strategies can be used to add and subtract. Students will be able to:

subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).	MP.7 Look for and make use of structures MP.8 Look for and express regularity in repeated reasoning	➢ add and subtract within 20, using the following strategies: ○ counting on; ○ making ten; ○ composing numbers; ○ decomposing numbers leading to a ten; ○ relationship between addition and subtraction, and ○ creating equivalent but easier or known sums. ➢ fluently add or subtract whole numbers within 20.
1.0A.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.	MP.2 Reason abstractly and quantitatively MP.5 Use appropriate tools strategically MP.6 Attend to precision	Concept(s): ➢ The meaning of the equal sign ➢ True and false statements ➢ The expression can be on the right side of the equal sign (*e.g. 7 = 8 - 1*). ➢ Both the left and right side of the equal sign may contain expressions (e.g. 5 + 2 = 1 + 4). Students are able to: ➢ determine if addition equations are true or false. ➢ determine if subtraction equations are true or false. Learning Goal 5: Determine if addition and subtraction equations, within 10, are true or false.

1.0A.D.8 Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = □ – 3, 6 + 6 = □.	MP.4 Model with mathematics MP.5 Use appropriate tools strategically MP.7 Look for and make use of structures MP.8 Look for and express regularity in repeated reasoning	Concept(s): No new concept(s) introduced Students are able to: ➢ determine the unknown number that makes an equation true. ➢ solve addition or subtraction equations by finding the missing whole number. Learning Goal 6: Solve addition and subtraction equations, within 10, by finding the missing whole number in any position.

New Jersey Student Learning Standards: Interdisciplinary Connections
https://www.nj.gov/education/cccs

L.VL.1.2. Ask and answer questions to determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content.

A. Choose flexibly from an array of strategies to determine the meaning of words and phrases.
B. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

L.VL.1.2. Ask and answer questions to determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content.

A. Choose flexibly from an array of strategies to determine the meaning of words and phrases.
B. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

SL.PE.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

A. Follow agreed-upon norms for discussions (e.g., 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 responding to the comments of others through multiple exchanges.
C. Ask questions to clear up any confusion about the topics and texts under discussion.

SL.II.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

New Jersey Student Learning Standards: Career Readiness, Life Literacies, and Key Skills	
Core Ideas	**Performance Expectations (Identified with Standard Number and statement)**
There are actions an individual can take to help make this world a better place.	9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business.

New Jersey Student Learning Standards: Computer Science and Design Thinking	
Core Ideas	**Performance Expectations (Identified with Standard Number and Statement)**
Individuals use computing devices to perform a variety of tasks accurately and quickly. Computing devices interpret and follow the instructions they are given literally.	8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences. 8.1.2.CS.2: Explain the functions of common software and hardware components of computing systems. 8.1.2.NI.1: Model and describe how individuals use computers to connect to other individuals, places, information, and ideas through a network. 8.1.2.NI.2: Describe how the Internet enables individuals to connect with others worldwide. 8.1.2.NI.3: Create a password that secures access to a device. Explain why it is important to create unique passwords that are not shared with others 8.1.2.NI.4: Explain why access to devices need to be secured. 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)**
There are actions an individual can take to help make this world a better place.	9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business.

Knowledge and Skills

Unit Learning Targets (Objectives):
Students will be able to…

Content Objectives:

- ➢ Recognize number partners for 10 and represent them using models such as 10-frames, number bonds, and equations
- ➢ Find the missing number partner for 10 when one part is unknown, and connect equations to visual and physical representations
- ➢ Understand that changing the order of addends does not change the total when adding to 10
- ➢ Interpret the meaning of actions in addition and subtraction word problems using models and symbols
- ➢ Represent and solve addition and subtraction problems within 10 using objects, drawings, equations, and strategies such as counting on and counting back
- ➢ Identify and explain the relationship between addition and subtraction and use related equations to solve subtraction problems
- ➢ Generate and work with fact families by creating related addition and subtraction equations
- ➢ Solve change-unknown problems by selecting efficient strategies and tools and writing corresponding equations

Language Objectives:

- ➢ Compare how number partners for 10 are shown across different visual and physical models
- ➢ Explain how to find a missing number partner for 10 and describe how models represent corresponding equations
- ➢ Identify and express that different orders of the same addends result in the same sum
- ➢ Use objects, visual models, and symbols to show understanding of actions in addition and subtraction problems
- ➢ Explain orally how models and equations represent the meaning and strategy behind solving word problems
- ➢ Describe and justify the steps used in problem-solving using mathematical reasoning and sentence frames
- ➢ Communicate how addition and subtraction equations are related and write fact families
- ➢ Use respectful and constructive language in discussions, including agreeing with or building upon classmates' ideas and providing reasons when disagreeing

Unit Enduring Understandings:
Students will know…

- ➢ You can count on to help solve addition and subtraction problems.
- ➢ Understanding how to read and show a problem helps you decide if you need to add or subtract.

- Numbers can be broken into parts, and using what you know about these parts helps you choose the best way to add or subtract.

Unit Essential Questions:

- How can I use what I know about adding and subtracting to solve problems?
- What is an equation and how does it show a number sentence?
- What strategies can help me solve word 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

  Number Sense Routines - Students strengthen their ability to work with numbers flexibly and identify mathematical concepts in the real world
  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

  1. Students make sense of problems and attempt their own representations and solution strategies.
  2. Hints are provided to students in the form of questions to consider as they solve each problem
  3. Students partner with another student to explain their thinking, representations, and solutions. Pair/Share questions in the worktexts support partner conversations.
  4. Students make connections between their strategies and those of their partner. They discuss similarities and differences and compare their representations, strategies, and answers
  5. The teacher circulates to assess student understanding and provide differentiated support. The teacher observes student thinking and student work.
  6. 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:
Student Worktext
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

Independent Learning
- ➢ IReady online personalized instruction
- ➢ Fluency and skills practice
- ➢ Interactive Tutorials (Lesson, Prerequisite, or Extend)
- ➢ Math Center Activities
- ➢ Additional Practice Activities
- ➢ Online Fluency Games

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
- Work Samples

Benchmark Assessments:

- Unit Assessments
- Benchmark Assessments
- Aimsweb Early Numeracy 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.

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.

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.
- 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
  - iReady manuals, workbooks, manipulatives
- Supplemental Materials
  - iReady Center Activities, manipulatives, learning stations, digital modules
  - Starfall
  - BrainpopJr
  - Abcya
  - Prodigygame
  - Xtramath
  - CoolMath
- Intervention Materials
  - Tools for Instruction, assigned digital lessons, manipulatives

Teacher Notes

OCEAN ACADEMY CHARTER SCHOOL
Unit 2 Overview

Content Area: Mathematics

Unit Title: Addition and Subtraction Within 20 (Trimester 1)	**Duration:** 30 Days

Target Course/Grade Level: Grade 1

Introduction/Unit Focus:

This unit introduces students to addition and subtraction within 20, with a focus on understanding and working with teen numbers. Students will learn to represent teen numbers as a combination of ten and some ones, helping them to break down and compose numbers more effectively. They will also develop strategies for adding three numbers, making a ten to add, and using a ten to subtract. In addition, students will explore the use of doubles and near doubles to solve addition problems. Throughout the unit, students will expand their math vocabulary to describe addition and subtraction concepts up to 20.

Prior to this unit, students should be comfortable with rote counting to 100 by ones and be able to count objects to find the result when sets are joined or separated. They should also have experience adding and subtracting within 10 using various strategies, such as counting on and counting back, and be familiar with identifying number partners for 10. These foundational skills will support their ability to engage with and master the content of this unit.

Disciplinary Concepts for the Unit

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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
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Content Standards: New Jersey Student	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills

Learning Standards for Mathematics		
1.0A.A.1. Represent and solve problems involving addition and subtraction. 1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, 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.4 Model with mathematics MP.5 Use appropriate tools strategically MP.6 Attend to precision	Concept(s): ➢ Symbols (unknowns) can be in any position. Students are able to: ➢ add, using objects and drawings, to solve word problems involving situations of adding to and putting together. ➢ subtract, using objects and drawings, to solve world problems involving situations of taking from and taking apart. Learning Goal 1: Use addition and subtraction <u>within 10</u> to solve problems, including word problems involving situations of adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions.
1.0A.A.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	MP.2 Reason abstractly and quantitatively MP.4 Model with mathematics MP.5 Use appropriate tools strategically MP.8 Look for and express regularity in repeated reasoning	Concept(s): ➢ Knowing 4 + 3 means that 3 + 4 is also known (commutative property/fact families). ➢ When adding , the numbers need not be added in any particular order.

		Students are able to: ➢ add and subtract, within 10, using properties of operations as strategies (commutative property). Learning Goal 2: ➢ Apply properties of operations (commutative property) as strategies to add or subtract within 10.
1.0A.B.3 Apply properties of operations as strategies to add and subtract. 3 Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.) {Students need not use formal terms for these properties}	MP.4 Model with mathematics MP.5 Use appropriate tools strategically MP.7 Look for and make use of structures MP.8 Look for and express regularity in repeated reasoning	Concept(s): ➢ Knowing 4 + 3 means that 3 + 4 is also known (commutative property/fact families). ➢ When adding , the numbers need not be added in any particular order. Students are able to: ➢ add and subtract, within 10, using properties of operations as strategies (commutative property). Learning Goal 2: Apply properties of operations (commutative property) as strategies to add or subtract within 10.
1.0A.B.4 Understand subtraction as an unknown-addend problem. For example, subtract 10 – 8 by	MP.5 Use appropriate tools strategically MP.8 Look for and express regularity in repeated reasoning	Concept(s): ➢ Subtraction can be represented as an unknown-addend

finding the number that makes 10 when added to 8.		problem. ➢ Finding 9 minus 3 means solving ? + 3 = 9 or 3 + ? = 9 (fact families). Students are able to: ➢ represent subtraction as an unknown addend problem. ➢ solve subtraction problems, <u>within 10</u>, using unknown addends. Learning Goal 3: Solve subtraction problems, <u>within 10</u>, by representing subtraction as an unknown addend problem and finding the unknown addend
1.0A.C.5 Relate counting to addition and subtraction	MP.2 Reason abstractly and quantitatively MP.5 Use appropriate tools strategically MP.6 Attend to precision MP.7 Look for and make use of structures	Concepts ➢ Counting can be used to add and subtract. Students are able to: ➢ Count on to add ➢ Count back to subtract Learning Goal 3: Count on to add and count backwards to subtract to solve addition and subtraction problems <u>within 10.</u>
1.0A.C.6 Add and subtract within 20, demonstrating accuracy and efficiency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g.,	MP.4 Model with mathematics MP.5 Use appropriate tools strategically MP.7 Look for and make use of structures MP.8 Look for and express regularity in repeated reasoning	Concept(s): ➢ Different strategies can be used to add and subtract. Students will be able to: ➢ add and subtract <u>within 20</u>, using the following strategies: ○ counting on; ○ making ten; ○ composing numbers; ○ decomposing

13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).		numbers leading to a ten; ○ relationship between addition and subtraction, and ○ creating equivalent but easier or known sums. ➢ fluently add or subtract whole numbers <u>within 20.</u>
1.0A.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.	MP.2 Reason abstractly and quantitatively MP.5 Use appropriate tools strategically MP.6 Attend to precision	Concept(s): ➢ The meaning of the equal sign ➢ True and false statements ➢ The expression can be on the right side of the equal sign (*e.g. 7 = 8 - 1*). ➢ Both the left and right side of the equal sign may contain expressions (e.g. 5 + 2 = 1 + 4). Students are able to: ➢ determine if addition equations are true or false. ➢ determine if subtraction equations are true or false. Learning Goal 5: Determine if addition and subtraction equations, <u>within 10,</u> are true or false.
1.0A.D.8 Determine the unknown whole number in an addition or	MP.4 Model with mathematics	Concept(s): No new concept(s) introduced

subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = □ – 3, 6 + 6 = □.	MP.5 Use appropriate tools strategically MP.7 Look for and make use of structures MP.8 Look for and express regularity in repeated reasoning	Students are able to: ➢ determine the unknown number that makes an equation true. ➢ solve addition or subtraction equations by finding the missing whole number. Learning Goal 6: Solve addition and subtraction equations, within 10, by finding the missing whole number in any position.

New Jersey Student Learning Standards: Interdisciplinary Connections
https://www.nj.gov/education/cccs

L.VL.1.2. Ask and answer questions to determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content.

C. Choose flexibly from an array of strategies to determine the meaning of words and phrases.
D. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

L.VL.1.2. Ask and answer questions to determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content.

C. Choose flexibly from an array of strategies to determine the meaning of words and phrases.
D. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

SL.PE.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

D. Follow agreed-upon norms for discussions (e.g., 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 responding to the comments of others through multiple exchanges.
F. Ask questions to clear up any confusion about the topics and texts under discussion.

SL.II.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

New Jersey Student Learning Standards: Career Readiness, Life Literacies, and Key Skills	
Core Ideas	**Performance Expectations (Identified with Standard Number and statement)**
There are actions an individual can take to help make this world a better place.	9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business.
New Jersey Student Learning Standards: Computer Science and Design Thinking	
Core Ideas	**Performance Expectations (Identified with Standard Number and Statement)**
Individuals use computing devices to perform a variety of tasks accurately and quickly. Computing devices interpret and follow the instructions they are given literally.	8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences. 8.1.2.CS.2: Explain the functions of common software and hardware components of computing systems. 8.1.2.NI.1: Model and describe how individuals use computers to connect to other individuals, places, information, and ideas through a network. 8.1.2.NI.2: Describe how the Internet enables individuals to connect with others worldwide. 8.1.2.NI.3: Create a password that secures access to a device. Explain why it is important to create unique passwords that are not shared with others 8.1.2.NI.4: Explain why access to devices need to be secured. 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)**
There are actions an individual can take to help make this world a better place.	9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business.

Knowledge and Skills
Unit Learning Targets (Objectives): *Students will be able to…*

Content Objectives:

- Understand that 10 individual ones can be grouped to form a unit called a ten, and apply this concept to compose and decompose teen numbers using concrete objects, drawings, words, and numbers
- Find the total of three addends by grouping strategically using number partners for 10 and doubles facts, and apply associative and commutative properties to make solving easier
- Write addition equations with three addends to represent word problems and reflect strategic grouping
- Recognize that breaking apart and recombining numbers does not change their value, and begin using "making a ten" as a strategy for efficient mental math
- Apply the strategy of decomposing numbers to reach 10 as a helpful benchmark when subtracting from teen numbers
- Use doubles facts and near doubles to find sums within 20, and select appropriate strategies based on the structure of the problem
- Use known addition strategies and properties to solve problems efficiently and with flexibility

Language Objectives:

- Demonstrate understanding of tens by grouping 10 items and describing them as a unit
- Explain and show how to compose and decompose teen numbers using objects, drawings, and numbers, and compare different strategies for solving similar problems
- Follow oral directions to solve addition problems with three addends and describe helpful ways to group numbers
- Read and interpret word problems in order to write accurate equations and explain ideas clearly using drawings or models
- Describe and model how breaking apart numbers can support addition through making a ten, using number bonds and mental math
- Articulate how subtraction can be solved by decomposing numbers and using familiar addition strategies
- Identify doubles and near doubles, explain how one strategy helps solve the other, and provide examples
- Justify strategies verbally or with writing and drawings, agree or disagree with classmates' thinking respectfully, and use sentence frames to build on others' ideas

Unit Enduring Understandings:
Students will know…

- Ten is a special and important number.
- Teen numbers are made of 10 and some extra ones.
- Numbers can be combined or split apart in different ways.
- What you know about adding and subtracting up to 10 can help you add and subtract up to 20.

Unit Essential Questions:

- How can I use the rules of adding and subtracting to solve problems?
- What is an equation, and how does it show a number sentence?
- What strategies can help me solve word 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

  Number Sense Routines - Students strengthen their ability to work with numbers flexibly and identify mathematical concepts in the real world
  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

  1. Students make sense of problems and attempt their own representations and solution strategies.
  2. Hints are provided to students in the form of questions to consider as they solve each problem
  3. Students partner with another student to explain their thinking, representations, and solutions. Pair/Share questions in the worktexts support partner conversations.
  4. Students make connections between their strategies and those of their partner. They discuss similarities and differences and compare their representations, strategies, and answers
  5. The teacher circulates to assess student understanding and provide differentiated support. The teacher observes student thinking and student work.
  6. 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:
Student Worktext
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

Independent Learning
- ➢ IReady online personalized instruction
- ➢ Fluency and skills practice
- ➢ Interactive Tutorials (Lesson, Prerequisite, or Extend)
- ➢ Math Center Activities
- ➢ Additional Practice Activities
- ➢ Online Fluency Games

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
- Work Samples

Benchmark Assessments:

- Unit Assessments
- Benchmark Assessments
- Aimsweb Early Numeracy 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.

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.

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.
- 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
  - iReady manuals, workbooks, manipulatives
- Supplemental Materials
  - iReady Center Activities, manipulatives, learning stations, digital modules
  - Starfall
  - BrainpopJr
  - Abcya
  - Prodigygame
  - Xtramath
  - CoolMath
- Intervention Materials
  - Tools for Instruction, assigned digital lessons, manipulatives

Teacher Notes

OCEAN ACADEMY CHARTER SCHOOL Unit 3 Overview	
Content Area: Mathematics	
Unit Title: Solving Word Problems and Making Comparisons (Trimester 2)	**Duration: 30 Days**
Target Course/Grade Level: Grade 1	

Introduction/Unit Focus:

This unit introduces students to solving word problems, analyzing data, and working with equations. Students will learn how addition and subtraction can be used to find the difference between quantities in real-world contexts. They will engage in asking meaningful questions that can be answered by collecting, organizing, and comparing data. As they solve word

problems, students will use a variety of tools including objects, drawings, numbers, and symbols to represent their thinking. A key focus of the unit is developing a clear understanding of the equal sign as a symbol that shows the relationship between two quantities, not just as a signal to compute an answer.

Throughout the unit, students will solve word problems with sums and differences within 20, including problems that involve comparing quantities. They will explore how to determine whether equations are true or false and will find missing numbers in equations that reflect real-world situations. Math vocabulary will be emphasized to help students explain their thinking clearly when working with problems, data, and equations.

To be successful in this unit, students should already have experience adding and subtracting within 20 using a variety of tools and strategies. They should also be familiar with using physical objects or drawings to model and solve story problems. In addition, students should have had opportunities to sort, organize, and count objects and to ask mathematical questions about collections. These prerequisite skills will provide a strong foundation for deeper understanding and problem solving as students engage with the concepts in this unit.

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

“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.”

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

Content Standards: New Jersey Student Learning Standards for Mathematics	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills

1.0A.A.1. Represent and solve problems involving addition and subtraction. 1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, 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.4 Model with mathematics MP.5 Use appropriate tools strategically MP.6 Attend to precision	Concept(s): ➢ Symbols (unknowns) can be in any position. Students are able to: ➢ add, using objects and drawings, to solve word problems involving situations of adding to and putting together. ➢ subtract, using objects and drawings, to solve world problems involving situations of taking from and taking apart. Learning Goal 1: Use addition and subtraction <u>within 10</u> to solve problems, including word problems involving situations of adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions.
1.0A.B.3 Apply properties of operations as strategies to add and subtract.3	MP.4 Model with mathematics MP.5 Use appropriate tools strategically MP.7 Look for and make use of structures	Concept(s): ➢ Knowing 4 + 3 means that 3 + 4 is

Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.) {Students need not use formal terms for these properties}	MP.8 Look for and express regularity in repeated reasoning	also known (commutative property/fact families). ➢ When adding , the numbers need not be added in any particular order. Students are able to: ➢ add and subtract, within 10, using properties of operations as strategies (commutative property). Learning Goal 2: Apply properties of operations (commutative property) as strategies to add or subtract <u>within 10.</u>
1.0A.B.4 Understand subtraction as an unknown-addend problem. For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.	MP.5 Use appropriate tools strategically MP.8 Look for and express regularity in repeated reasoning	Concept(s): ➢ Subtraction can be represented as an unknown-addend problem. ➢ Finding 9 minus 3 means solving ? + 3 = 9 or 3 + ? = 9 (fact families). Students are able to: ➢ represent subtraction as an unknown addend problem.

		➢ solve subtraction problems, within 10, using unknown addends. Learning Goal 3: Solve subtraction problems, within 10, by representing subtraction as an unknown addend problem and finding the unknown addend
1.0A.C.5 Relate counting to addition and subtraction	MP.2 Reason abstractly and quantitatively MP.5 Use appropriate tools strategically MP.6 Attend to precision MP.7 Look for and make use of structures	Concepts ➢ Counting can be used to add and subtract. Students are able to: ➢ Count on to add ➢ Count back to subtract Learning Goal 3: Count on to add and count backwards to subtract to solve addition and subtraction problems within 10.
1.0A.C.6 Add and subtract within 20, demonstrating accuracy and efficiency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between	MP.4 Model with mathematics MP.5 Use appropriate tools strategically MP.7 Look for and make use of structures MP.8 Look for and express regularity in repeated reasoning	Concept(s): ➢ Different strategies can be used to add and subtract. Students will be able to: ➢ add and subtract within 20, using the following strategies: ○ counting on; ○ making ten; ○ composing

addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).		numbers; ○ decomposing numbers leading to a ten; ○ relationship between addition and subtraction, and ○ creating equivalent but easier or known sums. ➢ fluently add or subtract whole numbers <u>within 20.</u>
1.0A.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.	MP.2 Reason abstractly and quantitatively MP.5 Use appropriate tools strategically MP.6 Attend to precision	Concept(s): ➢ The meaning of the equal sign ➢ True and false statements ➢ The expression can be on the right side of the equal sign (*e.g. 7 = 8 - 1*). ➢ Both the left and right side of the equal sign may contain expressions (e.g. 5 + 2 = 1 + 4). Students are able to: ➢ determine if addition equations are true or false.

		➢ determine if subtraction equations are true or false. Learning Goal 5: Determine if addition and subtraction equations, within 10, are true or false.
1.0A.D.8 Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = □ – 3, 6 + 6 = □.	MP.4 Model with mathematics MP.5 Use appropriate tools strategically MP.7 Look for and make use of structures MP.8 Look for and express regularity in repeated reasoning	Concept(s): No new concept(s) introduced Students are able to: ➢ determine the unknown number that makes an equation true. ➢ solve addition or subtraction equations by finding the missing whole number. Learning Goal 6: Solve addition and subtraction equations, within 10, by finding the missing whole number in any position.
New Jersey Student Learning Standards: Interdisciplinary Connections https://www.nj.gov/education/cccs		
L.VL.1.2. Ask and answer questions to determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content. E. Choose flexibly from an array of strategies to determine the meaning of words and		

phrases.

F. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

L.VL.1.2. Ask and answer questions to determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content.

E. Choose flexibly from an array of strategies to determine the meaning of words and phrases.

F. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

SL.PE.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

G. Follow agreed-upon norms for discussions (e.g., 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 responding to the comments of others through multiple exchanges.

I. Ask questions to clear up any confusion about the topics and texts under discussion.

SL.II.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

New Jersey Student Learning Standards: Career Readiness, Life Literacies, and Key Skills	
Core Ideas	**Performance Expectations (Identified with Standard Number and statement)**
There are actions an individual can take to help make this world a better place.	9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business.

New Jersey Student Learning Standards: Computer Science and Design Thinking	
Core Ideas	**Performance Expectations (Identified with Standard Number and Statement)**
Individuals use computing devices to perform a variety of tasks accurately and quickly. Computing devices interpret and follow the instructions they are given literally.	8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences. 8.1.2.CS.2: Explain the functions of common software and hardware components of computing systems. 8.1.2.NI.1: Model and describe how individuals use computers to connect to other individuals, places, information, and ideas through a network. 8.1.2.NI.2: Describe how the Internet enables individuals to connect with others worldwide.

	8.1.2.NI.3: Create a password that secures access to a device. Explain why it is important to create unique passwords that are not shared with others 8.1.2.NI.4: Explain why access to devices need to be secured. 8.1.2.AP.4: Break down a task into a sequence of steps.

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Core Ideas	**Performance Expectations (Identified with Standard Number and Statement)**
There are actions an individual can take to help make this world a better place.	9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business.

Knowledge and Skills

Unit Learning Targets (Objectives):
Students will be able to…

Content Objectives:

- Represent story problems involving known and unknown values using equations, and connect the structure of the story to the structure of the equation
- Select appropriate strategies to solve equations based on the values and operations involved
- Use fact families and related equations to help verify solutions and deepen understanding of number relationships
- Represent compare situations using concrete and visual models, and solve problems where the difference, larger quantity, or smaller quantity is unknown
- Apply both addition and subtraction strategies to solve compare problems and interpret what each part of the model or equation represents
- Collect and organize data and represent the information in the form of charts or graphs
- Analyze and interpret a set of data by asking and answering questions to make sense of the information
- Understand and interpret the equal sign as a symbol of balance between two quantities
- Determine whether equations are true or false and identify missing numbers in any position of an addition or subtraction equation

Language Objectives:

- Write equations to match the structure of word problems and identify known and missing values
- Explain strategies used to solve equations, including the use of fact families or number relationships

- Justify solutions by describing how models, drawings, or equations reflect the problem
- Use precise math vocabulary to explain and solve compare problems using terms such as "more than," "fewer than," and "difference"
- Connect drawings and models to the meaning of compare problems and explain the steps taken to solve them
- Represent data in charts or graphs and explain what the data shows using complete sentences and sentence frames
- Ask and answer questions about data sets and use respectful language to disagree with an interpretation, providing visual or numerical evidence
- Interpret and use the equal sign to describe equal values, and participate in discussions about whether a number sentence is true or false
- Identify unknown numbers in equations and clearly communicate ideas, building on others' thinking by adding relevant details

Unit Enduring Understandings:
Students will know…

- An equation shows that two sides are equal using an equal sign.
- Addition and subtraction are opposite operations.
- Understanding equations is key to solving math problems.

Unit Essential Questions:

- How can I use the rules of addition and subtraction to solve problems?
- What is an equation, and how does it work?
- What strategies can help me solve word problems 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, Reteach, Reinforce, or Extend the learning. Independent Learning Activities personalize instruction to all learners.

Whole Group Instruction

- Session Activities
  - Number Sense Routines - Students strengthen their ability to work with numbers flexibly and identify mathematical concepts in the real world
  - 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

1. Students make sense of problems and attempt their own representations and solution strategies.
2. Hints are provided to students in the form of questions to consider as they solve each problem
3. Students partner with another student to explain their thinking, representations, and solutions. Pair/Share questions in the worktexts support partner conversations.
4. Students make connections between their strategies and those of their partner. They discuss similarities and differences and compare their representations, strategies, and answers
5. The teacher circulates to assess student understanding and provide differentiated support. The teacher observes student thinking and student work.
6. 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:
Student Worktext
Ready Classroom Teacher Toolkit
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- ➢ Interactive Tutorial
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- ➢ Digital Manipulatives
- ➢ Math Journal
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- ➢ 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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- IReady online personalized instruction
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- 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.
- 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.
- 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
  - iReady manuals, workbooks, manipulatives
- Supplemental Materials
  - iReady Center Activities, manipulatives, learning stations, digital modules
  - Starfall
  - BrainpopJr
  - Abcya
  - Prodigygame
  - Xtramath
  - CoolMath
- Intervention Materials
  - Tools for Instruction, assigned digital lessons, manipulatives

Teacher Notes

OCEAN ACADEMY CHARTER SCHOOL Unit 4 Overview	
Content Area: Mathematics	
Unit Title: Numbers to 120 and Place Value (Trimester 2)	**Duration:** 30 Days
Target Course/Grade Level: Grade 1	

Introduction/Unit Focus:

This unit introduces students to understanding two-digit numbers as composed of tens and ones. Through hands-on practice and place value exploration, students will develop a foundational understanding that each two-digit number represents a certain number of tens and a certain number of ones. This understanding will support their ability to read, write, and determine the value of two-digit numbers with confidence.

Students will count and represent numbers to 120, learning to recognize and write numbers based on their place value. They will also explore number patterns that help them identify 10 more or 10 less than a given number, building their fluency with number relationships and mental math strategies. Additionally, students will compare the values of two-digit numbers using appropriate math vocabulary, reinforcing their understanding of place value and number sense.

Before beginning this unit, students should be able to count to 100 by ones and tens and understand that teen numbers are made up of a ten and some additional ones. These prerequisite skills will support their transition into working with larger numbers and more complex place value concepts throughout the unit.

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

"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."

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

Content Standards: New Jersey Student Learning Standards for Mathematics	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills
1.NBT.A.1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral	MP5. Use appropriate tools strategically. MP7. Look for and make use of structure. MP8. Look for and express regularity in repeated reasoning.	Concept(s): ➢ Number names and the count sequence up to 120. Students are able to: ➢ count orally by ones up to 120. ➢ count up to 120 beginning at any number less than 120. ➢ read numerals up to 120. ➢ write numerals up to 120. ➢ represent a number of objects up to 120 with a written number

		Learning Goal 1: ➢ Count to 120 orally, read and write numerals, and write numerals to represent the number of objects (up to 120).
1.NBT.B.2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones — called a "ten." C. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, nine tens (and 0 ones)	MP2. Reason abstractly and quantitatively. MP5. Use appropriate tools strategically. Mp7. Look for and make use of structure. Mp8. Look for and express regularity in repeated reasoning.	Concept(s): ➢ Two digits represent amounts of tens and ones. ➢ 10 can be thought of as a bundle of ten ones — called a *ten*. Students are able to: ➢ compose numbers to 20. ➢ decompose numbers to 20. ➢ identify the value of the number in the tens or ones place.
1.NBT.B.3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	MP5. Use appropriate tools strategically. MP6. Attend to precision MP7. Look for and make use of structure.	Concept(s): ➢ Use place value understanding to compare two digit numbers. ➢ Comparing numbers using symbols. Students are able to:

		➢ use the meaning of tens and ones digits to compare 2 two-digit numbers using >, =, and < symbols. Learning Goal 3: ➢ Use the meaning of tens and ones digits to record comparisons of 2 two-digit numbers using >, =, and < symbols.

New Jersey Student Learning Standards: Interdisciplinary Connections
https://www.nj.gov/education/cccs

L.VL.1.2. Ask and answer questions to determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content.

G. Choose flexibly from an array of strategies to determine the meaning of words and phrases.
H. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

L.VL.1.2. Ask and answer questions to determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content.

G. Choose flexibly from an array of strategies to determine the meaning of words and phrases.
H. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

SL.PE.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

J. Follow agreed-upon norms for discussions (e.g., 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 responding to the comments of others through multiple exchanges.
L. Ask questions to clear up any confusion about the topics and texts under discussion.

SL.II.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

New Jersey Student Learning Standards: Career Readiness, Life Literacies, and Key Skills	
Core Ideas	**Performance Expectations (Identified with Standard Number and statement)**
There are actions an individual can take to help make this world a better place.	9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business.

New Jersey Student Learning Standards: Computer Science and Design Thinking	
Core Ideas	**Performance Expectations (Identified with Standard Number and Statement)**
Individuals use computing devices to perform a variety of tasks accurately and quickly. Computing devices interpret and follow the instructions they are given literally.	8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences. 8.1.2.CS.2: Explain the functions of common software and hardware components of computing systems. 8.1.2.NI.1: Model and describe how individuals use computers to connect to other individuals, places, information, and ideas through a network. 8.1.2.NI.2: Describe how the Internet enables individuals to connect with others worldwide. 8.1.2.NI.3: Create a password that secures access to a device. Explain why it is important to create unique passwords that are not shared with others 8.1.2.NI.4: Explain why access to devices need to be secured. 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)**
There are actions an individual can take to help make this world a better place.	9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business.

Knowledge and Skills
Unit Learning Targets (Objectives): *Students will be able to…*

Content Objectives:

- Organize concrete objects into groups of tens and ones, and count the total by first counting by tens and then by ones
- Make meaningful connections between physical representations of grouped objects and visual models of tens and ones
- Understand the structure of two-digit numbers, recognizing that the digit in the tens place represents the number of tens in the quantity
- Read and write numbers up to 120, and count on from any number within that range
- Recognize and describe numerical patterns within a 120 chart, including patterns in rows and columns that repeat across decades
- Identify mentally what is 10 more or 10 less than a given number by understanding place value relationships, particularly changes in the tens place
- Use place value understanding to compare two-digit numbers, and apply comparison symbols to show the relationship between values
- Understand and correctly use the comparison symbols < (less than), > (greater than), and = (equal to) when writing statements about two-digit numbers

Language Objectives:

- Count aloud by 10s and then by 1s when organizing and totaling groups of tens and ones
- Explain the meaning of the tens digit in a two-digit number using precise place value vocabulary
- Describe how concrete models and visual representations of tens and ones are connected
- Ask questions when something is unclear and listen actively to gain understanding
- Identify, write, and say numbers up to 120, and count on from any number within that range
- Use the terms "row" and "column" to describe observed number patterns in the 120 chart
- Describe how to find 10 more or 10 less than a number by referencing changes in the tens digit
- Compare two-digit numbers orally using place value language, focusing on the number of tens and ones
- Read and interpret the symbols < and > as “less than” and “greater than” in oral and written comparisons
- Clearly explain steps for solving comparison problems using sequencing words such as “first,” “next,” and “then”

Unit Enduring Understandings:
Students will know…

- .Place value tells us what a number means based on its position.
- We can compare numbers by understanding their place value.

Unit Essential Questions:

- Why is place value important when we talk about numbers?

➢ Why do we break numbers into tens and ones?

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

Number Sense Routines - Students strengthen their ability to work with numbers flexibly and identify mathematical concepts in the real world
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

1. Students make sense of problems and attempt their own representations and solution strategies.
2. Hints are provided to students in the form of questions to consider as they solve each problem
3. Students partner with another student to explain their thinking, representations, and solutions. Pair/Share questions in the worktexts support partner conversations.
4. Students make connections between their strategies and those of their partner. They discuss similarities and differences and compare their representations, strategies, and answers
5. The teacher circulates to assess student understanding and provide differentiated support. The teacher observes student thinking and student work.
6. 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:
Student Worktext
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

Independent Learning
- ➢ IReady online personalized instruction
- ➢ Fluency and skills practice
- ➢ Interactive Tutorials (Lesson, Prerequisite, or Extend)
- ➢ Math Center Activities
- ➢ Additional Practice Activities
- ➢ Online Fluency Games

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
- Work Samples

Benchmark Assessments:

- Unit Assessments
- Benchmark Assessments
- Aimsweb Early Numeracy 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.

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.

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.
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- Offer chants, songs, and repetition for reinforcement.
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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.

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.
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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
  - iReady manuals, workbooks, manipulatives
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  - Starfall
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  - Abcya
  - Prodigygame
  - Xtramath
  - CoolMath
- Intervention Materials
  - Tools for Instruction, assigned digital lessons, manipulatives

Teacher Notes

OCEAN ACADEMY CHARTER SCHOOL
Unit 5 Overview

Content Area: Mathematics

Unit Title: Adding Tens and Ones (Trimester 3)	**Duration:** 30 Days

Target Course/Grade Level: Grade 1

Introduction/Unit Focus:

This unit introduces students to addition and subtraction involving two-digit numbers. Students will build on their understanding of place value to add and subtract multiples of ten from any number, laying the foundation for more complex addition strategies. They will begin to see how numbers change when tens are added or subtracted and use this understanding to solve problems efficiently.

Throughout the unit, students will learn to add tens to two-digit numbers and to combine two-digit numbers with one-digit numbers. As their skills grow, they will add two-digit numbers using place value strategies, including making a ten to simplify the addition process. Emphasis will be placed on using precise mathematical vocabulary to describe strategies and explain thinking, helping students articulate their problem-solving steps.

To be successful in this unit, students should already be able to represent two-digit numbers using tens and ones, have strategies for adding two one-digit numbers, and understand that they can count on from one of the addends instead of always starting from one. These prerequisite skills will support their transition to working with larger numbers and developing flexible strategies for solving addition and subtraction problems.

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.

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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.

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

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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

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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.

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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;

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(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.

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

Content Standards: New Jersey Student Learning Standards for Mathematics	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills
1.0A.A.1. Represent and solve problems involving addition and subtraction. 1. Use addition and subtraction within 20 to	MP.1 Make sense of problems and persevere in solving them MP.4 Model with mathematics MP.5 Use appropriate tools strategically MP.6 Attend to precision	Concept(s): ➢ Symbols (unknowns) can be in any position.

solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.		Students are able to: ➢ add, using objects and drawings, to solve word problems involving situations of adding to and putting together. ➢ subtract, using objects and drawings, to solve world problems involving situations of taking from and taking apart. Learning Goal 1: Use addition and subtraction within 10 to solve problems, including word problems involving situations of adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions.
1.0A.B.3 Apply properties of operations as strategies to add and subtract.	MP.4 Model with mathematics MP.5 Use appropriate tools strategically MP.7 Look for and make use of structures	Concept(s): ➢ Knowing 4 + 3 means that 3 + 4 is

3 Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.) {Students need not use formal terms for these properties}	MP.8 Look for and express regularity in repeated reasoning	also known (commutative property/fact families). ➢ When adding , the numbers need not be added in any particular order. Students are able to: ➢ add and subtract, within 10, using properties of operations as strategies (commutative property). Learning Goal 2: Apply properties of operations (commutative property) as strategies to add or subtract <u>within 10.</u>
1.0A.B.4 Understand subtraction as an unknown-addend problem. For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.	MP.5 Use appropriate tools strategically MP.8 Look for and express regularity in repeated reasoning	Concept(s): ➢ Subtraction can be represented as an unknown-addend problem. ➢ Finding 9 minus 3 means solving ? + 3 = 9 or 3 + ? = 9 (fact families). Students are able to: ➢ represent subtraction as an unknown addend problem.

		➢ solve subtraction problems, within 10, using unknown addends. Learning Goal 3: Solve subtraction problems, within 10, by representing subtraction as an unknown addend problem and finding the unknown addend
1.0A.C.5 Relate counting to addition and subtraction	MP.2 Reason abstractly and quantitatively MP.5 Use appropriate tools strategically MP.6 Attend to precision MP.7 Look for and make use of structures	Concepts ➢ Counting can be used to add and subtract. Students are able to: ➢ Count on to add ➢ Count back to subtract Learning Goal 3: Count on to add and count backwards to subtract to solve addition and subtraction problems within 10.
1.0A.C.6 Add and subtract within 20, demonstrating accuracy and efficiency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between	MP.4 Model with mathematics MP.5 Use appropriate tools strategically MP.7 Look for and make use of structures MP.8 Look for and express regularity in repeated reasoning	Concept(s): ➢ Different strategies can be used to add and subtract. Students will be able to: ➢ add and subtract within 20, using the following strategies: ○ counting on; ○ making ten; ○ composing numbers;

addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).		○ decomposing numbers leading to a ten; ○ relationship between addition and subtraction, and ○ creating equivalent but easier or known sums. ➢ fluently add or subtract whole numbers within 20.
1.0A.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.	MP.2 Reason abstractly and quantitatively MP.5 Use appropriate tools strategically MP.6 Attend to precision	Concept(s): ➢ The meaning of the equal sign ➢ True and false statements ➢ The expression can be on the right side of the equal sign (*e.g. 7 = 8 - 1*). ➢ Both the left and right side of the equal sign may contain expressions (e.g. 5 + 2 = 1 + 4). Students are able to: ➢ determine if addition equations are true or false. ➢ determine if subtraction equations are true or false.

		Learning Goal 5: Determine if addition and subtraction equations, within 10, are true or false.
1.0A.D.8 Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = □ – 3, 6 + 6 = □.	MP.4 Model with mathematics MP.5 Use appropriate tools strategically MP.7 Look for and make use of structures MP.8 Look for and express regularity in repeated reasoning	Concept(s): No new concept(s) introduced Students are able to: ➢ determine the unknown number that makes an equation true. ➢ solve addition or subtraction equations by finding the missing whole number. Learning Goal 6: Solve addition and subtraction equations, within 10, by finding the missing whole number in any position.

New Jersey Student Learning Standards: Interdisciplinary Connections
https://www.nj.gov/education/cccs

L.VL.1.2. Ask and answer questions to determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content.

I. Choose flexibly from an array of strategies to determine the meaning of words and phrases.

J. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

L.VL.1.2. Ask and answer questions to determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content.

I. Choose flexibly from an array of strategies to determine the meaning of words and

phrases.

J. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

SL.PE.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

M. Follow agreed-upon norms for discussions (e.g., 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 responding to the comments of others through multiple exchanges.

O. Ask questions to clear up any confusion about the topics and texts under discussion.

SL.II.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

New Jersey Student Learning Standards: Career Readiness, Life Literacies, and Key Skills	
Core Ideas	**Performance Expectations (Identified with Standard Number and statement)**
There are actions an individual can take to help make this world a better place.	9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business.

New Jersey Student Learning Standards: Computer Science and Design Thinking	
Core Ideas	**Performance Expectations (Identified with Standard Number and Statement)**
Individuals use computing devices to perform a variety of tasks accurately and quickly. Computing devices interpret and follow the instructions they are given literally.	8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences. 8.1.2.CS.2: Explain the functions of common software and hardware components of computing systems. 8.1.2.NI.1: Model and describe how individuals use computers to connect to other individuals, places, information, and ideas through a network. 8.1.2.NI.2: Describe how the Internet enables individuals to connect with others worldwide. 8.1.2.NI.3: Create a password that secures access to a device. Explain why it is important to create unique passwords that are not shared with others 8.1.2.NI.4: Explain why access to devices need to be secured. 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)**
There are actions an individual can take to help make this world a better place.	9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business.

Knowledge and Skills

Unit Learning Targets (Objectives):
Students will be able to…

Content Objectives:

- Recognize that numbers such as 10, 20, 30, 40, 50, 60, 70, 80, and 90 represent groups of tens with 0 ones
- Add and subtract multiples of 10 to and from other multiples of 10
- Add multiples of 10 to any two-digit number using models, number lines, or 100 charts
- Apply familiar models and strategies to add a two-digit number and a one-digit number when the sum of the ones is less than 10
- Decompose numbers into tens and ones to support addition strategies
- Add two-digit numbers to other two-digit numbers within 100 when the ones combine to make a sum less than 10
- Add two-digit and one-digit numbers where the ones combine to make 10 or more, crossing into the next ten
- Solve addition problems involving crossing a ten by developing efficient strategies and explaining reasoning
- Extend the use of concrete and visual models to add two-digit numbers
- Understand and apply the concept of adding tens to tens and ones to ones when solving two-digit addition problems
- Write and interpret equations using composition and decomposition of numbers to show addition strategies

Language Objectives:

- Show understanding of groupings of tens and 0 ones in writing using standard number form
- Orally explain how to add and subtract multiples of 10, and describe strategies using a 100 chart or number line
- Make meaningful connections between new and previously solved problems, identifying similarities in structure or strategy
- Use models to describe how to add two-digit and one-digit numbers and how to decompose numbers into tens and ones

- Explain how to use a 100 chart to add a one-digit or two-digit number to another two-digit number
- Acknowledge others' thinking by identifying shared reasoning or strategies
- Record equations that reflect crossing into a new ten when ones total 10 or more, using clear equation frames
- Justify strategies and solutions for adding two-digit and one-digit numbers using models and clear reasoning
- Describe each step in a multi-step addition process using models, visuals, and appropriate math language
- Listen actively and restate what was heard using sentence frames for clarity and understanding
- Clearly explain how previously learned addition strategies can be applied or adapted to new problems involving two-digit numbers
- Describe the process of adding tens and ones separately using objects, visuals, or verbal explanation
- Write and explain equations that use composing and decomposing to solve addition problems
- Agree with and build on classmates' ideas by explaining why a shared idea makes sense or works mathematically

Unit Enduring Understandings:
Students will know…

- Place value tells us what a number means based on its position.
- When adding two-digit numbers, we add the tens together and the ones together.

Unit Essential Questions:

- Why is place value important when we talk about numbers?
- How can knowing tens and ones help me add and subtract two-digit numbers?
- Why do we break numbers into tens and ones?
- What are some ways I can add numbers up to 100?

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
  Number Sense Routines - Students strengthen their ability to work with numbers flexibly and identify mathematical concepts in the real world

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
  1. Students make sense of problems and attempt their own representations and solution strategies.
  2. Hints are provided to students in the form of questions to consider as they solve each problem
  3. Students partner with another student to explain their thinking, representations, and solutions. Pair/Share questions in the worktexts support partner conversations.
  4. Students make connections between their strategies and those of their partner. They discuss similarities and differences and compare their representations, strategies, and answers
  5. The teacher circulates to assess student understanding and provide differentiated support. The teacher observes student thinking and student work.
  6. 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:
Student Worktext
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

Independent Learning
- IReady online personalized instruction
- Fluency and skills practice
- Interactive Tutorials (Lesson, Prerequisite, or Extend)
- Math Center Activities
- Additional Practice Activities
- Online Fluency Games

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
- Work Samples

Benchmark Assessments:
- Unit Assessments
- Benchmark Assessments
- Aimsweb Early Numeracy 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.

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.

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.
- 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
  - iReady manuals, workbooks, manipulatives
- Supplemental Materials
  - iReady Center Activities, manipulatives, learning stations, digital modules
  - Starfall
  - BrainpopJr
  - Abcya

- Prodigygame
- Xtramath
- CoolMath

➢ Intervention Materials

- Tools for Instruction, assigned digital lessons, manipulatives

Teacher Notes

OCEAN ACADEMY CHARTER SCHOOL Unit 6 Overview	
Content Area: Mathematics	
Unit Title: Geometry and Measurement (Trimester 3)	**Duration:** 30 Days
Target Course/Grade Level: Grade 1	

Introduction/Unit Focus:

This unit introduces students to key measurement and geometry concepts, including shapes, time, length, and money. Students will explore how to describe and compare the length of objects using informal measurement strategies and vocabulary. They will learn how to tell and write time to the hour and half hour using analog and digital clocks, developing a foundational understanding of how time is measured and represented.

In geometry, students will describe the attributes of two- and three-dimensional shapes and begin composing compound shapes by putting smaller shapes together. They will also learn to recognize smaller shapes within larger ones and begin partitioning shapes into equal parts, using the terms halves and fourths (or quarters) to describe these divisions. In addition, students will begin exploring the concept of money by identifying coins and determining their value.

To support success in this unit, students should already be familiar with comparing the lengths of two objects using terms like shorter, longer, and taller. They should also be able to name and draw basic two- and three-dimensional shapes such as rectangles, squares, triangles, and circles, and distinguish between flat and solid shapes. These prerequisite skills will help students build a deeper understanding of spatial reasoning, measurement, and the value of currency.

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

"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."

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

Content Standards: New Jersey Student Learning Standards for Mathematics	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills
1.M.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.	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.	Concept(s): ➢ Objects can be compared and ordered based on length. Students will be able to: ➢ compare the length of two objects. ➢ compare the length of two objects by using a third object as a measuring tool. ➢ order three objects by length. Learning Goal 8: Order three objects by length and compare the lengths

		of two objects by using the third object (e.g., if the crayon is shorter than the marker and the marker is shorter than the pencil then the crayon is shorter than the pencil).
1.M.A.2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps.	MP.5 Use appropriate tools strategically MP.6 Attend to precision.	Concept(s): ➢ The length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Students will be able to: ➢ lay multiple copies of a shorter object (the length unit) end to end. ➢ use a shorter object to express the length of a longer object. Learning Goal 9: Order three objects by length and compare the lengths of two objects by using the third object (e.g., if the crayon is shorter than the marker and the marker is shorter than the pencil then the crayon is shorter than the pencil).
1.M.B.3. Tell and write time in hours and	MP5. Use appropriate tools strategically.	Concept(s):

half-hours using analog and digital clocks	MP6. Attend to precision MP7. Look for and make use of structure.	➢ Time is represented on analog and on digital clocks. ➢ Analog clocks have *hands* that indicate the time in hours and minutes. Students are able to: ➢ tell and write time in hours using analog and digital clocks. ➢ tell and write time in half-hours using analog and digital clocks. ➢ use the term *o'clock* in reporting time to the hour.
1.DL.A.1 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	MP.4 Model with mathematics MP.5 Use appropriate tools strategically MP.6 Attend to precision	Concept(s): ➢ Numbers can be organized to represent data. Students are able to: ➢ organize objects, representing data, in up to three categories. ➢ represent data with objects, drawings, or numerals, in up to three categories. ➢ ask and answer questions about: ○ the total number of data points; ○ the number of data points in each category, and ○ how many more or less are in one category than in another.

		Learning Goal 11: ➢ Organize, represent, and interpret data with up to three categories, compare the number of data points among the categories, and find the total number of data points.
1.G.A.1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.	MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.6 Attend to precision.	Concept(s): ➢ Defining attributes versus non defining attributes. Students are able to: ➢ name attributes that define two-dimensional shapes (square, triangle, rectangle, regular hexagon). ➢ name attributes that do not two-dimensional shapes. ➢ build and draw shapes when given defining attributes. Learning Goal 1: Name the attributes of a given two-dimensional shape (square, triangle, rectangle, regular hexagon), distinguishing between defining and non-defining attributes. Learning Goal 2: Build and draw shapes when given defining attributes

1.G.A.2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.	MP.4 Model with mathematics. MP.5 Use appropriate tools strategically MP.7 Look for and make use of structure.	Concept(s): ➢ Shapes can be composed from other shapes (e.g. trapezoids can be composed from triangles). ➢ New shapes can be composed from composite shapes. Students are able to: ➢ create a composite shape using two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles). ➢ create a composite shape using three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders). ➢ compose *new* shapes from the *composite* shapes. Learning Goal 3: Create a composite shape by composing two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles and quarter circles) or three-dimensional shapes (cubes, right

		rectangular prisms, right circular cones, and right circular cylinders), and compose new shapes.
1.G.A.3. Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares	MP.5 Use appropriate tools strategically	Concept(s): • Shapes can be partitioned into equal parts or shares. • Equal shares are named based on the number of shares that make the whole (e.g. halves, fourths, quarters). • Shares can be described based on their relation to the whole (e.g half of, fourth of, quarter of). • The whole can be described based on the number of shares. • Decomposing a whole into more equal shares creates smaller shares. Students are able to: • partition circles and rectangles into two or four equal shares. • distinguish equal shares from those that are not equal. • describe shares using the words halves, fourths, and quarters. • describe the relationship between the whole and the share using the phrases half of, fourth of, and quarter of. • describe the whole as two of, or four of the shares. • decompose a whole into a greater number of equal shares and identify the new shares as smaller. Learning Goal 3: Partition circles and rectangles into two or four equal shares,

		describing the shares using halves, fourths, and quarters and use the phrases half of, fourth of, and quarter of. Describe the whole circle (or rectangle) partitioned into two or four equal shares as two of, or four of the shares.

New Jersey Student Learning Standards: Interdisciplinary Connections
https://www.nj.gov/education/cccs

L.VL.1.2. Ask and answer questions to determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content.

K. Choose flexibly from an array of strategies to determine the meaning of words and phrases.
L. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

L.VL.1.2. Ask and answer questions to determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content.

K. Choose flexibly from an array of strategies to determine the meaning of words and phrases.
L. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

SL.PE.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

P. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).
Q. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.
R. Ask questions to clear up any confusion about the topics and texts under discussion.

SL.II.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

New Jersey Student Learning Standards: Career Readiness, Life Literacies, and Key Skills

Core Ideas	Performance Expectations (Identified with Standard Number and statement)
There are actions an individual can take to help make this world a better place.	9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business.

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Individuals use computing devices to perform a variety of tasks accurately and quickly. Computing devices interpret and follow the instructions they are given literally.	8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences. 8.1.2.CS.2: Explain the functions of common software and hardware components of computing systems. 8.1.2.NI.1: Model and describe how individuals use computers to connect to other individuals, places, information, and ideas through a network. 8.1.2.NI.2: Describe how the Internet enables individuals to connect with others worldwide. 8.1.2.NI.3: Create a password that secures access to a device. Explain why it is important to create unique passwords that are not shared with others 8.1.2.NI.4: Explain why access to devices need to be secured. 8.1.2.AP.4: Break down a task into a sequence of steps.

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There are actions an individual can take to help make this world a better place.	9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business.

Knowledge and Skills

Unit Learning Targets (Objectives):
Students will be able to…

Content Objectives:

- Distinguish between defining and non-defining attributes of shapes
- Describe and name shapes based on defining attributes such as number of sides and corners
- Build and draw new shapes using specific sets of defining attributes
- Combine two or more shapes to create composite shapes
- Partition circles, squares, and rectangles into two or four equal parts
- Describe equal parts using the terms halves, fourths, and quarters
- Understand and explain that equal parts make up a whole, and recognize the relationship between the number and size of parts

- Read analog and digital clocks to the hour and half hour
- Draw the hour and minute hands on an analog clock to show specific times
- Write the time shown on an analog or digital clock
- Compare the lengths of three objects and put them in order from shortest to longest
- Describe the length of objects in relation to one another, both directly and indirectly
- Use a third object to compare the lengths of two items when direct comparison is not possible
- Measure the length of objects using a whole number of nonstandard units
- Understand that measuring means counting units placed end to end with no gaps or overlaps
- Identify pennies, nickels, dimes, and quarters
- Know and use the values of coins to find the total value of a collection

Language Objectives:

- Identify and explain which attributes help define a shape and which do not
- Read written shape attributes and use them to build and draw the described shape
- Make connections between different pattern blocks and describe how they can form the same composite shape
- Explain how to partition shapes into equal parts and use mathematical vocabulary to describe them
- Follow written directions to describe parts of shapes using the terms halves, fourths, and quarters
- Compare equal parts using clear language and justify understanding with models or pictures
- State the time shown on analog and digital clocks
- Describe the position of the hour and minute hands to represent a given time
- Record and express time in both spoken and written form
- Explain disagreements using models or examples that support a different answer
- Describe how to directly and indirectly compare the length of objects using comparative vocabulary
- Share and explain the process of comparing objects using a third reference item
- Describe the steps of measuring with nonstandard units and explain how gaps or overlaps affect accuracy
- Make connections between different representations (objects, pictures, models) of the same measurement problem
- Name and describe the value of U.S. coins both orally and in writing
- Explain how to count coins to determine the total value of a collection
- Participate in discussions by agreeing with and building on classmates' ideas using sentence starters and connecting words

Unit Enduring Understandings:
Students will know…

- We measure the length of an object using smaller units of the same size.
- Data is information that helps us understand or make decisions.
- Time is a way to measure how long something takes.
- We can identify shapes by their special features (attributes).
- Any shape can be split into smaller shapes.
- The attributes of an object include its shape and number of sides.

Unit Essential Questions:

- What are some ways to organize data?
- Why is it important to know how to tell time?
- What is the difference between the length of time and the time of day?
- How do you choose the right tool and unit to measure something?

Instructional Plan

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- Session Activities

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5. The teacher circulates to assess student understanding and provide differentiated support. The teacher observes student thinking and student work.
6. 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:
Student Worktext
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

Independent Learning
- ➢ IReady online personalized instruction
- ➢ Fluency and skills practice
- ➢ Interactive Tutorials (Lesson, Prerequisite, or Extend)
- ➢ Math Center Activities
- ➢ Additional Practice Activities

- Online Fluency Games

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- Benchmark Assessments
- Aimsweb Early Numeracy Assessment

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- Anecdotal Notes

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- Project Based Learning Activity
- Math In Action
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- Pre-teach and review key vocabulary.
- Provide summaries, word banks, and visual glossaries.
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- Read aloud directions; use choral reading, chants, or songs when appropriate.
- Provide preferential seating.
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- Follow the 504 plan.
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- 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.
- 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
  - iReady manuals, workbooks, manipulatives
- Supplemental Materials
  - iReady Center Activities, manipulatives, learning stations, digital modules
  - Starfall
  - BrainpopJr
  - Abcya
  - Prodigygame
  - Xtramath
  - CoolMath
- Intervention Materials
  - Tools for Instruction, assigned digital lessons, manipulatives

Teacher Notes