

Trimester	Unit Title	Recommended Instructional Days
2	Addition and Subtraction Relationships	11 - 13 days
Domain: Operations and Algebraic Thinking		
<p><i>Strand:</i></p> <p>1.OA.A.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 unknown in all positions, e.g., by using objects, drawings, and equations with a symbol for their unknown number to represent the problem. 🌱</p> <p>1.OA.B.3 Apply properties of operations as strategies to add or subtract. (Students need not use formal terms for these properties.) <i>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 $6+4=10+2=12$. (Associative property of addition.) (Students need not use formal terms for these properties.)</i></p> <p>1.OA.B.4 Understand subtraction as an unknown-addend problem. <i>For example, subtract $10-8$ by finding the number that makes 10 when added to 8.</i></p> <p>1.OA.C.6 Add and subtract within 20, with accuracy and efficiency for addition and subtraction within 10. Use strategies such as counting on; making 10 (e.g., $8+6=8+2+4=10+4=14$); decomposing a number leading to 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 $6+6+1=12+1=13$).</p> <p>1.OA.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. <i>For example, which of the following equations are true and which are false? $6=6$, $7=8-1$, $5+2=2+5$, $4+1=5+2$.</i></p> <p>1.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8+?=11$, $5=?-3$, $6+6=?$.</i></p>		

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Major Cluster



Supporting Cluster



Additional Cluster



Climate Change Opportunity

Progress Indicator: ◊ Tests ◊ Homework / Classwork ◊ Projects ◊ Formative assessments ◊ Summative assessments ◊ Performance assessments

Mathematical Practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reason of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Recommended Activities, Investigations, Interdisciplinary Connections, and/or Student Experiences to Explore NJSL-CLKS within Unit

Essential Questions:

Lesson 9.1: What are related facts?

Lesson 9.2: What are related facts?

Lesson 9.3: How can addition check your subtraction answer?

Lesson 9.4: How can related facts help to find unknown numbers?

Lesson 9.5: How can addition facts find related subtraction facts?

Lesson 9.6: How do you know if you should add or subtract?

Lesson 9.7: What are the different ways you can add or subtract to make the same number?

Lesson 9.8: What does it mean if an equation is true?

Lesson 9.9: What strategies can you use to find sums and differences?

Essential Understandings:

Lesson 9.1: Use related facts to complete equations with missing numbers.

Lesson 9.2: Identify related addition and subtraction facts.

Lesson 9.3: Use addition to check subtraction.

Lesson 9.4: Use a related fact to find an unknown number.

Lesson 9.5: Use an addition fact to find a related subtraction fact.

Lesson 9.6: Choose which operation to use to solve a problem.

Lesson 9.7: Add and subtract in different ways to make the same number.

Lesson 9.8: Add and subtract to find if an equation is true or false.

Lesson 9.9: Use addition and subtraction strategies to help find sums and differences.

Vocabulary

- related facts

Suggested Activity Description:

Waggle, On the Spot Videos, Tier 2 and 3 Intervention Resources, Vocabulary Activities, Grab and Go Differentiation Kit, Explore and Guided/Independent Practice related to the NJSL, Essential Question Discussion and Check-In, Share and Show, Basic Skills Review, Manipulative Activity, Reteach Activity, Reading Strategies Activity, Making Connections, Multilingual Support, Performance Task, Enrich Activity, Exit Ticket

Interdisciplinary Connections:

Science:

(Lesson 9.1)

Materials: Rocks of different sizes and colors

1. Display a variety of rocks of different sizes and colors. Explain that rocks create Earth's surface, and minerals give rocks their colors.
2. Have children count out 11 rocks, sort them into two groups, and use them to model related facts with a sum of 11. Then have children write the four related addition and subtraction equations.
3. Repeat for other related facts through 18.

(Lesson 9.7)

1. Discuss tree rings with children.
2. Explain that every year a tree lives, its trunk grows another ring of sapwood.
3. Present problems for children to solve such as the following: The tree in my yard is 11 years old. Write 5 ways to make the number 11.
4. Have children share their ways. Write the ways on the board. Then challenge children to find more ways, if any, to make the number 11.

(Lesson 9.9)

Materials: Sunflower seeds, pumpkin seeds

1. Discuss plant seeds. Explain that many plants start out as seeds which then grow and change. Different plants come from different seeds.
2. Have pairs of children sort groups of seeds into types.
3. Have children write and solve addition and subtraction problems about the total number of seeds, the number of sunflower seeds, and the number of pumpkin seeds.

Social Studies:

(Lesson 9.1)

Materials: Large map with symbols and a key

1. Display a map, and point out the symbols. Explain that a symbol is a picture that stands for something, just as the symbols $+$, $-$, and $=$ stand for plus, minus, and is equal to.
2. Point to the map key, and discuss what each symbol on the map stands for.
3. As a class, create a map of the classroom with symbols and a key. Discuss what each symbol on the map represents.

(Lesson 9.7)

Materials: Set of dominoes

1. Describe to children that dominoes is a game that originated in China.
2. Explain that it is played using rectangular tiles called “bones” and that each bone has two sets of dots.
3. Pick one domino and add the two sets of dots.
4. Then have children find other ways to make that sum.

(Lesson 9.9)

1. Ask children to look at the buildings on their street when they go home. Tell them to count and record the number of buildings on each side of the street.
2. Once they bring the information, have them answer these questions.
3. How many buildings are on your block altogether?
4. Which side of the street has more buildings? How many more does it have?

Language Arts:

1. Vocabulary Builder TB pg. 398.



Climate Change: Given a number of light bulb stickers, students may determine how many total stickers they and two partners have. With support, students may ask and answer questions about how turning off lights and unplugging electronics saves electricity. Students may then, with their partners, determine who saves the most electricity based on the number of light bulb stickers each has.

Spot Light On: Define "include" with examples.

Social and Emotional Learning: Competencies	Social and Emotional Learning: Sub-Competencies
SEL Competencies: <ul style="list-style-type: none"> • Self- awareness • Social Awareness • Self- Management • Relationship Skills • Responsible Decision-Making 	<ul style="list-style-type: none"> • Recognizing the importance of self-confidence in handling daily tasks and challenges. • Demonstrate an awareness of the expectations for social interactions in a variety of ways. • Demonstrate an understanding of the need for mutual respect when viewpoints differ.

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				<ul style="list-style-type: none"> • Identify and apply ways to persevere through alternative methods to achieve goals. • Utilize positive communication and social skills to interact effectively with others. • Develop, implement, and model effective problem solving and critical thinking skills.
Assessments (Formative) <i>To show evidence of meeting the standard/s, students will successfully engage within:</i>		Assessments (Summative) <i>To show evidence of meeting the standard/s, students will successfully complete:</i>		
Formative Assessments: • Teacher Observations • Exit Tickets • Quizzes • Self Assessments • Math Journals • Homework/Classwork • Teacher created assessments		Benchmarks & Summative Assessments: Chapter/Unit Assessments • Standardized Tests • Project-based Assessments		
Differentiated Student Access to Content: Teaching and Learning <i>Resources/Materials</i>				
Core Resources	Alternate Core Resources <i>IEP/504/At-Risk/ESL</i>	ELL Core Resources	Gifted & Talented Core Resources	
Go Math Workbook, Interactive Student Edition, ST MATH 60 minutes a week, Waggle, Math on the Spot Videos, iReady, Khan Academy, Illustrative Mathematics, Learn360, TeacherTube, BrainPOP, Freckle, LearnZillion, MobyMax, Achieve the Core, Desmos, RTI	Reteaching worksheets, Skill building workbook, Math manipulatives, iTools, Leveled practice worksheets	Multilingual glossary, eGlossary, Multilingual Activities on ED, Vocabulary Cards, Success for English Learners worksheets, Leveled Strategies for English Learners, Linguistic Support	ST MATH special projects, Enrichment worksheets, Art of Problem Solving, Leveled assessments	
Supplemental Resources				
Technology: • Chromebooks • Online math manipulatives Other: • Google Classroom, Google Meets, Schoology, Interactive Workbooks • Illustrative Mathematics • insidemathematics.org • National Library of Virtual Manipulatives				

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Differentiated Student Access to Content: Recommended <i>Strategies & Techniques</i>			
Core Resources	Alternate Core Resources <i>IEP/504/At-Risk/ESL</i>	ELL Core Resources	Gifted & Talented Core
Deliver instruction utilizing varied learning styles including audio, visual, and tactile/kinesthetic, provide individual instruction as needed, modify assessments and/or rubrics, repeat	Utilize a multi-sensory (VAKT) approach during instruction, provide alternate presentations of skills by varying the method (repetition, simple explanations, additional examples, modeling, etc.), modify test content and/or format, allow students to retake test for additional credit, provide additional times and preferential seating as needed, review, restate and repeat directions, provide study guides, and/or break assignments into segments of shorter tasks.	Extend time requirements, preferred seating, positive reinforcement, check often for understanding/review, oral/visual directions/prompts when necessary, supplemental materials including use of an online bilingual dictionary, and modified assessment and/or rubric.	Create an enhanced set of introductory activities, integrate active teaching/learning opportunities, incorporate authentic components, propose interest-based extension activities, and connect student to related

NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	Disciplinary Concept(s): Information and Media Literacy	
	Core Ideas:	Digital tools can be used to display data in various ways.
	Performance Expectation/s:	9.4.2.TL.4 Navigate a virtual space to build context and describe the visual content.
	Career Readiness, Life Literacies, & Key Skills Practices	
	Act as a responsible and contributing community member and employee. Attend to financial well-being. Consider the environmental, social and economic impacts of decisions. Demonstrate creativity and innovation. Utilize critical thinking to make sense of problems and persevere in solving them. Model integrity, ethical leadership and effective management.	

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	<p>Plan education and career paths aligned to personal goals. Use technology to enhance productivity, increase collaboration and communicate effectively. Work productively in teams while using cultural/global competence.</p>
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New Jersey Legislative Statutes and Administrative Code (place an "X" before each law/statute if/when present within the curriculum map)								
Amistad Law: <i>N.J.S.A. 18A 52:16A-88</i>		Holocaust Law: <i>N.J.S.A. 18A:35-28</i>		LGBT and Disabilities Law: <i>N.J.S.A. 18A:35-4.35</i>	X	Diversity & Inclusion: <i>N.J.S.A. 18A:35-4.36a</i>	X	Standards in Action: <i>Climate Change</i>