

Trimester	Unit Title	Recommended Instructional Days
2	Addition and Subtraction Relationships	8 - 13 Days
Domain		
<p>Strand:</p> <ul style="list-style-type: none"> 1.0.A.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 unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. 1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making 10; decomposing a number leading to a 10; using the relationship between addition and subtraction; and creating equivalent but easier or known sums. 1.OA.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? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$. 1.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$. <p> Major Cluster Supporting Cluster Additional Cluster </p>		
<p>Progress Indicator: ◊ Tests ◊ Homework / Classwork ◊ Projects ◊ Formative assessments ◊ Summative assessments</p>		
Mathematical Practices:		
<ol style="list-style-type: none"> 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 5.1: How can making a model help you solve a problem?

Lesson 5.2: How do related facts help you find missing numbers?

Lesson 5.3: How do you know if addition and subtraction facts are related?

Lesson 5.4: How can you use addition to check subtraction?

Lesson 5.5: How can you use a related fact to find an unknown number?

Lesson 5.6: How can you use a related fact to find an unknown number?

Lesson 5.7: How do you choose when to add and when to subtract to solve a problem? Lesson 5.8: How can you add and subtract in different ways to make the same number? Lesson 5.9: How can you decide if a number sentence is true or false?

Lesson 5.10: How can addition and subtraction strategies help you find sums and differences?

Essential Understandings:

Lesson 5.1: Solve addition and subtraction problem situations using the strategy make a model. Lesson 5.2: Record related facts within 20

Lesson 5.3: Identify related addition and subtraction facts within 20

Lesson 5.4: Apply the inverse relationship of addition and subtraction

Lesson 5.5: Use related facts to determine unknown numbers

Lesson 5.6: Use a related fact to subtract

Lesson 5.7: Choose an operation and strategy to solve an addition or subtraction word problem Lesson 5.8: Represent equivalent forms of numbers using sums and differences within 20 Lesson 5.9: Determine if an equation is true or false

Lesson 5.10: Add and subtract facts within 20 and demonstrate fluency for addition and subtraction within 10

Vocabulary

- Related Facts

Suggested Activity Description:

Personal Math Trainer, Tutorial Videos, Vocabulary Game, Reading Grab and Go Activity, Explore and Guided/Independent Practice related to the NJSL, Evaluation Online Activity, Essential Question Discussion and Check –In, Basic Skills Review, Manipulative Activity, Reteach Activity, Reading Strategies Activity, Success for English Learners Activity, Performance Task

Interdisciplinary Connections:

STEM Activity: In Chapter 5, children develop their understanding of addition and subtraction relationships, by learning related facts. These same topics are used often in the development of various science concepts and process skills. Help children make the connection between math and science through the S.T.E.M. activities and activity worksheets found at www.thinkcentral.com.

In Chapter 5, children connect math and science with the S.T.E.M. Activity Care for Earth! and the accompanying worksheets (pages 99 and 100). Through this S.T.E.M. Activity, children will connect the GO Math! Chapter 5 concepts and skills with various conservation concepts, including recycling. It is recommended that this S.T.E.M. Activity be used after Lesson 5.6.

Science:

1. Display a variety of rocks of different sizes and colors. Explain that rocks create Earth's surface, and minerals give rocks their colors. • 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 sentences. • Repeat for other related facts through 18.
2. Discuss tree rings with children. • Explain that every year a tree lives, its trunk grows another ring of sapwood. • 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. • 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.

Social Studies:

1. Display a map, and point out the symbols. Explain that a symbol is a picture that stands for something, just as the symbols 1, 2, and 5 stand for add, subtract, and is equal to. • Point to the map key, and discuss what each symbol on the map stands for. • As a class, create a map of the classroom with symbols and a key. Discuss what each symbol on the map represents.
2. Tell children that dominoes is a game that originated in China. • Explain that it is played using rectangular tiles called "bones" and that each bone has two sets of dots. • Pick one domino and add the two sets of dots. • Then have children find other ways to make that sum.

Language Arts:

1. Vocabulary Builder pg. 253- **Visualize It** Have children sort the review words and record them in the graphic organizer. Have children share how they sorted the words and tell how they decided where to place each one. **Understand Vocabulary** You may want to share the following concepts with children.
 - An addition fact joins two numbers, or quantities, together.
 - The answer to an addition problem is called the sum.
 - A subtraction fact takes one quantity away from the other or compares two quantities.
 - The answer to a subtraction problem is called the difference.

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2. Picture Puzzles - (From the Grab and Go Differentiated Center Kit) 3. Juggling - (From the Grab and Go Differentiated Center Kit) 4. The Sum is the Same - (From the Grab and Go Differentiated Center Kit)			
Spot Light On: Use random response strategies			
Social and Emotional Learning: <i>Competencies</i>		Social and Emotional Learning: <i>Sub-Competencies</i>	
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. • 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 • District Assessments • 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, IXL,ST MATH 60 minutes a week, Personal Math Trainer, Math on the	Reteaching worksheets, Skill building workbook, Math manipulatives, Leveled practice	Dictionary for native language, Video tutorial in native language, Success for English Learners worksheets, Leveled	ST Math special projects, G& T tasks, Enrichment worksheets, Art

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Spot Videos, My HRW, Khan Academy, Illustrative Mathematics, Learn360, TeacherTube, BrainPOP, Freckle, LearnZillion, MobyMax, ST Math, Edulastic, Achieve the Core, Desmos,	worksheets	Strategies for English Learners, Linguistic Support	of Problem Solving, Leveled assessments
Supplemental Resources			
<p>Technology:</p> <ul style="list-style-type: none"> • Chromebooks • Online math manipulatives <p>Other:</p> <ul style="list-style-type: none"> • Google Classroom, Google Meets, Schoology, Interactive Workbooks • Illustrative Mathematics • insidemathematics.org • National Library of Virtual Manipulatives 			
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): Digital Citizenship	
	Core Ideas:	Digital communities allow for social interactions that can result in positive or negative outcomes.
	Performance Expectation/s:	9.4.2.CI.1 Demonstrate openness to new ideas and perspectives
	Career Readiness, Life Literacies, & Key Skills Practices	
	<p>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. 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>	

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>	Standards in Action: <i>Climate Change</i>	