Trimester	Unit Title	Recommended Instructional Days					
2	2 2-Digit Subtraction 16-20 Days						
Domain							
Strand:							
<ul> <li>2.OA.A.1- Represent and solve problems involving addition and subtraction. Use addition and subtraction within 100 to solve one- and two- steps world problems, involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</li> <li>2.NBT.B.5 -Use place value understanding and properties of operations to add and subtract. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</li> <li>Major Cluster</li> </ul>							
<b>Progress Indicator:</b> • Tests • Homework / Classwork • Projects • Formative assessments • Summative assessments							
Mathematical Practices:							
<ol> <li>Make sense of problems and persevere in solv</li> <li>Reason abstractly and quantitatively.</li> <li>Construct viable arguments and critique the ref.</li> <li>Model with mathematics.</li> <li>Use appropriate tools strategically.</li> <li>Attend to precision.</li> <li>Look for and make use of structure.</li> <li>Look for and express regularity in repeated ref.</li> </ol>	eason of others.						

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

#### **Essential Questions:**

- Lesson 5.1- How does breaking apart a number make subtracting easier?
- Lesson 5.2- How does breaking apart a number line make subtracting easier?
- Lesson 5.3- When do you regroup in subtraction?
- Lesson 5.4- How do you record 2-digit subtraction?
- Lesson 5.5- How do you record the steps when subtracting 2-digit numbers?
- Lesson 5.6- How do you record steps when subtracting 2-digit numbers?
- Lesson 5.7- What are two different ways to write subtraction problems?
- Lesson 5.8- How can you use addition to solve subtraction problems?
- Lesson 5.9- How can drawing a diagram help when solving subtraction problems?
- Lesson 5.10- How do you write a number sentence to represent a problem?
- Lesson 5.11- How do you decide what steps to do to solve a problem?

#### **Essential Understandings:**

- Lesson 5.1- Break apart a 1-digit subtrahend to subtract it from a 2-digit number.
- Lesson 5.2- Break apart a 2-digit subtrahend to subtract i from a 2-digit number.
- Lesson 5.3- Model 2-digit subtraction with regrouping.
- Lesson 5.4- Draw quick pictures and record 2-digit subtraction using the standard algorithm.
- Lesson 5.5- Record 2-digit subtraction using the standard algorithm.
- Lesson 5.6- Practice 2-digit subtraction with and without regrouping.
- Lesson 5.7- Rewrite horizontal subtraction problems vertically in the standard algorithm format.
- Lesson 5.8- Addition to find differences.
- Lesson 5.9- Solve problems involving 2-digit subtraction by using the strategy draw a diagram.
- Lesson 5.10- Represent subtraction situations with number sentences using a symbol for the unknown number.
- Lesson 5.11- Analyze word problem to determine what operations to use to solve multistep problems.

### **Vocabulary**

- ٠
- difference
- regroup
- tens
- ones
- digits

Personal Math Trainer, Tutorial Videos, Vocabulary Game, Reading Grab and Go Activity, Explore and Guided/Independent Practice related to the NJSLS, 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 2-digit subtraction, by practicing the subtraction of two 2-digit numbers. These same topics are used often in the development of various science concepts and process skills. Help students make the connection between math and science through the S.T.E.M. activities and activity worksheets found at Think Central.

In Chapter 2, children connect math and science with the S.T.E.M. Activity Measure It! 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 different variations of weather, including finding the difference of two temperatures. Children will also discover the overall role that math plays in science. It is recommended that this S.T.E.M. Activity be used after Lesson 5.10.

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## Science:

1. If children are not familiar with using an outdoor thermometer, draw a thermometer on the board and discuss how the temperature is read. • Help children read and record the temperature outdoors once in the morning and once in the afternoon. • Then have children use subtraction to compare the two temperatures.

2. Show children pictures of some different types of centipedes. Tell children that centi- means "one hundred," but not all centipedes have 100 legs.
Tell children that the number of legs for different centipedes varies. Ask: Suppose one centipede has 17 pairs of legs (34 legs total) and another centipede has 35 pairs of legs (70 legs total). How many more legs does the second centipede have? 18 more pairs of legs, or 36 more legs

# **Social Studies:**

1. Provide children with some normal temperatures to compare. For example, you may wish to use the normal temperatures from different cities in your state, all from the same month. • Have children locate the cities on a map. Discuss how the locations of the cities compare. Explain that location can affect temperatures. Point out that cities that are close to each other often have similar temperatures. • Have children use subtraction to compare the normal temperatures in two of the cities.

2. Have children work in small groups to research a famous historical person that has had a positive impact in the United States. Have children record the age of that person at different times in his or her life when significant events happened. • Have children determine the difference in the number of years in age between pairs of major events.

### Language Arts:

1. Vocabulary Builder pg. 315 - **Visualize It** The top box has the word difference. Have children describe this word in the box below it. Then instruct children to give examples of number sentences that show differences and circle the difference for each in the lower left box. In the other box children should write number sentences that do not have differences. **Understand Vocabulary** You may wish to use the following sentences to review the vocabulary words before beginning the activity.

<ul> <li>The number 17 has 2 digits—a 1 and a 7.</li> <li>The number 82 has 8 tens.</li> <li>The number 4 has 4 ones.</li> <li>2. Comic Books for Sale - (From the Grab and Go Differentiated Center Kit)</li> <li>3. Party Plans - (From the Grab and Go Differentiated Center Kit)</li> <li>Spot Light On: Ask challenging questions equitably of all students.</li> </ul>					
Social and Emotional Learning:	Social and Emotional Learning:				
<i>Competencies</i>	Sub-Competencies				
SEL Competencies: • Self- awareness • Social Awareness • Self- Management • Relationship Skills • Responsible Decision-Making	<ul> <li>Recognizing the importance of self-confidence in handling daily tasks and challenges.</li> <li>Demonstrate an awareness of the expectations for social interactions in a variety of ways.</li> <li>Demonstrate an understanding of the need for mutual respect when viewpoints differ.</li> <li>Identify and apply ways to persevere through alternative methods to achieve goals.</li> <li>Utilize positive communication and social skills to interact effectively with others.</li> <li>Develop, implement, and model effective problem solving and critical thinking skills.</li> </ul>				
Assessments (Formative)	Assessments (Summative)				
To show evidence of meeting the standard/s, students will successfully	To show evidence of meeting the standard/s, students will successfully				
engage within:	complete:				
Formative Assessments:	Benchmarks & Summative Assessments:				
• Teacher Observations • Exit Tickets • Quizzes • Self Assessments • Math	Chapter/Unit Assessments • Standardized Tests • District Assessments •				
Journals • Homework/Classwork • Teacher created assessments	Project-based Assessments				

Differentiated Student Access to Content: Teaching and Learning <u>Resources/Materials</u>						
Core Resources	Alternate Core Resources IEP/504/At-Risk/ESL	ELL Core Resources	Gifted & Talented Core Resources			
Go Math Workbook, IXL,ST MATH 60 minutes a week, Personal Math Trainer, Math on the Spot Videos, My HRW, Khan Academy, Illustrative Mathematics, Learn360, TeacherTube, BrainPOP, Freckle, LearnZillion, MobyMax, ST Math, Edulastic, Achieve the Core, Desmos,	Reteaching worksheets, Skill building workbook, Math manipulatives, Leveled practice worksheets	Dictionary for native language, Video tutorial in native language, Success for English Learners worksheets, Leveled Strategies for English Learners, Linguistic Support	ST Math special projects, G& T tasks, Enrichment worksheets, Art of Problem Solving, Leveled assessments			
Supplemental Resources						
<ul> <li>Technology:</li> <li>Chromebooks • Online math manipulatives</li> <li>Other:</li> <li>Google Classroom, Google Meets, Schoology, Interactive Workbooks • Illustrative Mathematics • insidemathematics.org • National Library of Virtual Manipulatives</li> </ul>						
Differentiated Student Access to Content: Recommended <u>Strategies &amp; Techniques</u>						
Core Resources	Alternate Core Resources IEP/504/At-Risk/ESL	ELL Core Resources	Gifted & Talented Core			
Deliver instruction utilizing varied learning styles including audio, visual, and tactile/kinesthetic, provide individual instruction as needed, modif 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,	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	Create an enhanced set of introductory activities, integrate active teaching/learning opportunities, incorporate authentic components, propose			

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	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.	dictionary, and modified assessment and/or rubric.	interest-based extension activities, and connect student to related			
	Disciplinary Concept(s): Global & Cultural Awareness					
NJSLS CAREER READINESS, LIFE LITERACIES & KEY	Core Ideas:	Culture and geography can shape an individual's experiences and perspectives.				
	Performance Expectation/s:	<b>9.4.5.GCA.1:</b> Analyze how culture shapes individual and community perspectives and points of view				
SKILLS	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. 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.					

New Jersey Legislative Statutes and Administrative Code (place an "X" before each law/statute if/when present within the curriculum map)								
Amistad Law: N.J.S.A. 18A 52:16A-88		Holocaust Law: N.J.S.A. 18A:35-28		LGBT and Disabilities Law: N.J.S.A. 18A:35-4.35	X	Diversity & Inclusion: N.J.S.A. 18A:35-4.36a		Standards in Action: <i>Climate Change</i>