

Trimester	Unit Title	Recommended Instructional Days
1 & 2	Number Concepts	16-20 Days
<b>Domain</b>		
<p><b>Strand:</b></p> <ul style="list-style-type: none"> <li><span style="color: green;">■</span> 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><span style="color: green;">■</span> 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><span style="color: green;">■</span> 2.NBT.B.6- Use place value understanding and properties of operations to add and subtract. Add up to four two-digit numbers using strategies based on place value and properties of operations.</li> <li><span style="color: green;">■</span> 2.NBT.B.9-Use place value understanding and properties of operations to add and subtract. Explain why addition and subtraction strategies work, using place value and the properties of operations (Explanations may be supported by drawing or objects).</li> </ul> <p style="margin-top: 20px;"> <span style="color: green;">■</span> Major Cluster                <span style="color: blue;">■</span> Supporting Cluster                <span style="color: yellow;">○</span> Additional Cluster         </p>		
<p><b>Progress Indicator:</b> ◇ Tests ◇ Homework / Classwork ◇ Projects ◇ Formative assessments ◇ Summative assessments</p>		
<b>Mathematical Practices:</b>		
<ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reason of others.</li> </ol>		

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 NJSLs-CLKS within Unit**

**Essential Questions:**

- Lesson 4.1- How does breaking apart a number make it easier to add?  
Lesson 4.2- How can you make an addend a ten to help solve an addition problem?  
Lesson 4.3- How do you break apart addends to add tens and then add ones?  
Lesson 4.4- When do you regroup in addition?  
Lesson 4.5- How do you record 2-digit addition?  
Lesson 4.6- How do you record the steps when adding 2-digit numbers?  
Lesson 4.7- How do you record the steps when adding 2-digit numbers?  
Lesson 4.8- What are two different ways to write addition problems?  
Lesson 4.9- How can drawing a diagram help when solving addition problems?  
Lesson 4.10- How do you write a number sentence to represent a problem?  
Lesson 4.11- What are some ways to add 3 numbers?  
Lesson 4.12- What are some ways to add 4 numbers?

**Essential Understandings:**

- Lesson 4.1- Find a sum by breaking apart a 1-digit addend to make a 2-digit addend a multiple of 10.  
Lesson 4.2- Apply place-value concepts when using a break-apart strategy for 2-digit addition.  
Lesson 4.3- Model 2-digit with regrouping.  
Lesson 4.4- Draw quick pictures and record 2-digit addition using the standard algorithm.  
Lesson 4.5- Draw pictures and record 2-digit addition using the standards algorithm.  
Lesson 4.6- Record 2-digit addition using the standard algorithm.  
Lesson 4.7- Practice 2-digit addition with and without regrouping.  
Lesson 4.8- Rewrite horizontal addition problems vertically in the standard algorithm format.  
Lesson 4.9- Solve problems involving 2-digit addition by using the strategy draw a diagram.  
Lesson 4.10- Represent addition situations with number sentences using a symbol for the unknown number.  
Lesson 4.11- Find sums of three 2-digit numbers.  
Lesson 4.12- Find sums of four 2-digit numbers.

**Vocabulary**

- regroup
- column

**Suggested Activity Description:**

Personal Math Trainer, Tutorial Videos, Vocabulary Game, Reading Grab and Go Activity, Explore and Guided/Independent Practice related to the NJLS, 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 4, children develop their understanding of 2-digit addition, such as adding numbers with two or more digits. These same topics are often used in the development of various science concepts and process skills. Help children make the connection between math, science, and technology through the S.T.E.M activities and activity worksheets found at Think Central.

In Chapter 4, children connect math, science, and technology with the S.T.E.M. Activity Everyday Technology and the accompanying worksheets (pages 97 and 98). Through this S.T.E.M. Activity, children will connect the GO Math! Chapter 4 concepts and skills with various examples of technology, including finding the numbers of gallons of water a person uses over several days. It is recommended that this S.T.E.M. Activity be used after Lesson 4.9.

**Science:**

1. Say: Motion is when objects move. Objects that do not move on their own sometimes need people to make them move. Today, you are going to push a toy car and measure how far it moves using connecting cubes. • Have children work in pairs. Mark a starting point on a carpeted area with tape. Have one child gently push the car from that point. Mark where the car stops with another piece of tape. Repeat, this time having the second child push the car from where it stopped. • Have children use the cubes to measure how far the car moved when they pushed it. Then have them add the two distances together to find out how far the car moved in all.

2. Point out that different parts of our body have different functions. Tell children that our legs have muscles, tendons, and bones that help us to do different things, such as walk, run, jump, and hop. • Have children hop in pairs. Each child counts his or her hops in a 30-second period. • Partners add the number of hops by each child to find the number of hops per pair.

**Social Studies:**

1. Review with children different types of transportation vehicles, such as cars, buses, and trucks. Discuss that some vehicles have a special purpose. For example, school buses are used to bring many children to school and delivery trucks are used to transport many objects at once. • Give children data for the number of cars and buses that are in the school parking lot. For example, tell children that there are 37 cars and 12 buses in a parking lot. Write the numbers on the board. Then write on the board: How many vehicles are there in all? • Encourage children to break apart the addends to help them find the sum.

2. Show the U.S. flag. Point out its 50 stars and remind children that each star on the flag represents one of the 50 states within the United States. • Tell children that each state also has its own flag, and some of these flags also feature stars. Show pictures of some state flags with stars (for example: Kansas, Arkansas, Rhode Island, Indiana, Tennessee, Ohio, and Missouri). As a class, count the stars on each flag you show. Make a list on the board to show how many stars are on each flag. • Have children model the number of stars on two different flags using base-ten blocks and workmats. Then have children add to find the sum.

**Language Arts:**

1. Vocabulary Builder pg.235 - **Visualize It** Help children understand that the top box, addition sentence, is going to be broken down into parts to define it. First, an example of an addition sentence is shown. Then children will break down that sentence into its parts. They will write the review word that names the part of the sentence each number is in the box below it. Explain that a word may be used more than once. **Understand Vocabulary** You may want to use the following example to review the other words from the list. Write the number 27 on the board. Then say:

- This number has 2 digits.
- The 2 is in the tens place.
- The 7 is in the ones place.

2. Nature’s Numbers - (From the Grab and Go Differentiated Center Kit)

3. Butterfly Farm - (From the Grab and Go Differentiated Center Kit)

**Spot Light On:** Creating brave spaces.

<b>Social and Emotional Learning: <i>Competencies</i></b>	<b>Social and Emotional Learning: <i>Sub-Competencies</i></b>
<p>SEL Competencies:</p> <ul style="list-style-type: none"> <li>• Self- awareness</li> <li>• Social Awareness</li> <li>• Self- Management</li> <li>• Relationship Skills</li> <li>• Responsible Decision-Making</li> </ul>	<ul style="list-style-type: none"> <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>

**Grade 2 Mathematics  
Unit 4 Number Concepts**

September  
2022

<b>Assessments (Formative)</b> <i>To show evidence of meeting the standard/s, students will successfully engage within:</i>		<b>Assessments (Summative)</b> <i>To show evidence of meeting the standard/s, students will successfully complete:</i>	
<b>Formative Assessments:</b> • Teacher Observations • Exit Tickets • Quizzes • Self Assessments • Math Journals • Homework/Classwork • Teacher created assessments		<b>Benchmarks &amp; Summative Assessments:</b> Chapter/Unit Assessments • Standardized Tests • District Assessments • Project-based Assessments	
<b>Differentiated Student Access to Content: Teaching and Learning <i>Resources/Materials</i></b>			
<b>Core Resources</b>	<b>Alternate Core Resources <i>IEP/504/At-Risk/ESL</i></b>	<b>ELL Core Resources</b>	<b>Gifted &amp; Talented Core Resources</b>
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
<b>Supplemental Resources</b>			
<b>Technology:</b> • Chromebooks • Online math manipulatives <b>Other:</b> • Google Classroom, Google Meets, Schoology, Interactive Workbooks • Illustrative Mathematics • insidemathematics.org • National Library of Virtual Manipulatives			

<b>Differentiated Student Access to Content: Recommended <i>Strategies &amp; Techniques</i></b>			
<b>Core Resources</b>	<b>Alternate Core Resources <i>IEP/504/At-Risk/ESL</i></b>	<b>ELL Core Resources</b>	<b>Gifted &amp; Talented Core</b>
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

<b>NJSLS CAREER READINESS, LIFE LITERACIES &amp; KEY SKILLS</b>	<b>Disciplinary Concept(s): Critical Thinking &amp; Problem-Solving</b>	
	<b>Core Ideas:</b>	The ability to solve problems effectively begins with gathering data, seeking resources, and applying critical thinking skills.
	<b>Performance Expectation/s:</b>	<b>9.4.5.CT.4:</b> Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global
	<b>Career Readiness, Life Literacies, &amp; Key Skills Practices</b>	
	<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.</p>	

**Grade 2 Mathematics**  
**Unit 4 Number Concepts**

September  
2022

	<p>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>	<b>X</b>	Diversity & Inclusion: <i>N.J.S.A. 18A:35-4.36a</i>	Standards in Action: <i>Climate Change</i>