Trimester	Unit Title	Recommended Instructional Days					
2	<b>Division Facts and Strategies</b>	18 - 22 days					
Domain							
Strand:							
<b>3.OA.A.3</b> Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.							
<b>3.OA.C.7</b> Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$ , one knows $40 \div 5 = 8$ ) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.							
<b>3.OA.A.4</b> Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$ , $5 = ? \div 3$ , $6 \times 6 = ?$ .							
<b>3.OA.D.8</b> Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.							
Kev:							
Major Cluster O Additional Cluster							
Progress Indicator:							

Mathematical Practices:					
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 NJSLS-CLKS within Unit					
Essential Questions:         Lesson 7.1 What does dividing by 2 mean?         Lesson 7.2 What strategies can you use to divide by 10?         Lesson 7.3 What does dividing by 5 mean?         Lesson 7.4 What strategies can you use to divide by 3?         Lesson 7.5 What strategies can you use to divide by 4?         Lesson 7.6 What strategies can you use to divide by 6?         Lesson 7.7 What strategies can you use to divide by 7?         Lesson 7.8 What strategies can you use to divide by 8?         Lesson 7.9 What strategies can you use to divide by 9?         Lesson 7.10 How can you use the strategy, act it out, to solve two-step problems?					
<ul> <li>Lesson 7.11 Why are there rules such as the order of operations?</li> <li><u>Essential Understandings:</u></li> <li>Lesson 7.1 Use models to represent division by 2.</li> <li>Lesson 7.2 Use repeated subtraction, a number line, or a multiplication table to divide by 10.</li> <li>Lesson 7.3 Count up by 5s, count back on a number line, or use 10s facts and doubles to divide by 5.</li> <li>Lesson 7.4 Use equal groups, a number line, or a related multiplication fact to divide by 3.</li> </ul>					

**Lesson 7.5** Use an array, equal groups, factors, or a related multiplication fact to divide by 4.

**Lesson 7.6** Use equal groups, a related multiplication fact, or factors to divide by 6.

**Lesson 7.7** Use an array, a related multiplication fact, or equal groups to divide by 7.

**Lesson 7.8** Use repeated subtraction, a related multiplication fact, or a multiplication table to divide by 8.

**Lesson 7.9** Use equal groups, factors, or a related multiplication fact to divide by 9.

**Lesson 7.10** Solve two-step problems by using the strategy, *act it out*.

**Lesson 7.11** Perform operations in order when there are no parentheses.

## Vocabulary:

• Order of operations

## Suggested Activity Description(s):

Show what you know, Problem of the Day, Fluency Builders, Personal Math Trainer, Math on the Spot Videos, Real World Videos, Vocabulary Preview Activity, Reteach and Enrichment Activities, Interactive Student Edition Textbook, RtI Activities, Grab and Go Differentiated Centers, Journal Writing, Advanced Learners Activities, Assessments, Standards Focus Packets for the related NJSLS, Success for English Learners Activities, Performance Task

## Interdisciplinary Connections:

**STEM Activity:** In Chapter 7, students extend their understanding of division facts and strategies, such as dividing by 4. 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 7, students connect math and science with the S.T.E.M. Activity Chemical Changes and the accompanying worksheets (pgs. 109-110 In correlation with ScienceFusion pgs. 134-137)). Through this S.T.E.M. Activity, students will connect to the GO Math! Chapter 7 concepts and skills with various observations about chemical changes, including reading information from a bar graph. Students will also discover the overall role that math plays in science. It is recommended that this S.T.E.M. Activity will be used after Lesson 7.5.

# Science:

1. A bird has a backbone and feathers. All birds have wings, but not all birds can fly. Birds have lungs and are warm-blooded, just like mammals, but they do not feed their babies milk. Baby birds hatch from eggs. Some birds, like macaws, can live to be 100 years old! There are 5 eggs divided among 5 nests. If there are the same number of eggs in each nest, how many eggs are in each nest?

2. Flowers produce seeds so they can produce new plants. Seeds need water, soil, and sunlight to grow. Some of the ways that seeds can spread are by animals, wind, and water. People can also plant seeds in a garden. Sunflower seeds are actually the fruit of the sunflower plant. Suppose Amanda has 36 sunflower seeds. She plants 6 seeds in each row of a garden. How many rows does Amanda plant?

3. Reptiles are vertebrates (they have a backbone). They have scaly skin. Reptiles breathe with lungs like people do; when they are under water, they have to come up to breathe oxygen. Most reptiles hatch from eggs. They are cold-blooded, which means they need the sun to get warm. Crocodiles, snakes, lizards, and turtles are all reptiles. If there are 36 reptiles in 9 exhibits at the zoo, and each exhibit has the same number, how many reptiles are in each exhibit?

#### Social Studies:

1. North America has a variety of physical features including lakes, mountains, deserts, and plains. The coastal plain includes the Florida peninsula. A peninsula is a piece of land almost completely surrounded by water. Florida has the Atlantic Ocean on its east and south sides and the Gulf of Mexico on its west side. Florida is famous for its beautiful beaches. Have students write word problems about a day at the beach that involve division rules for 1 or 0 or a number divided by itself.

2. Phosphorus is needed for plant and animal nutrition. Most phosphorus comes from phosphate rock. The United States makes and uses the most phosphate in the world. Phosphorus can be found in our food, our water, and our bodies. Many products you use every day contain phosphorus, such as baking powder, orange juice, cheese, and toothpaste. Lisa used 18 slices of cheese to make 6 sandwiches. How many slices of cheese did she put on each sandwich?

3. Pioneers first settled near the ocean, but their desire for land brought them west. Settlers followed the waterways because they were pathways of trade. Areas away from water were often too dry or too hot for farming. Many settlers traveled west in wagon trains. At night, they pulled their wagons into a circle for safety. What if 45 covered wagons make 9 circles for the night? If the same number of wagons are in each circle, how many wagons are in each circle?

4. Connect to Social Studies - Picture Book Art, Go Math pg. 430

#### Language Arts:

1. Corey's Cookie Caper - (From the Differentiated Centers Kit Grab and Go)

2. On the Menu: Bamboo, Figs and Other Tasty Treats - (From the Differentiated Centers Kit Grab and Go)

3. The Garden Fence - (From the Differentiated Centers Kit Grab and Go)

Spot Light On: Show students the why behind how things are done when possible.

Social and Emotional Learning:	Social and Emotional Learning:
Competencies	Sub-Competencies
SEL Competencies: • Self- awareness • Social Awareness • Self- Management • Relationship Skills	<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> </ul>

Grade 3 Mathematics Unit 7: Division Facts and Strategies							
Responsible Decision-Making		<ul> <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>					
Assessment To show evidence of meeting the s engage	s (Formative) tandard/s, students will successfully e within:	Assessments (Summative) To show evidence of meeting the standard/s, students will successfully complete:					
Formative Assessments: • Teacher Observations • Exit Tickets Journals • Homework/Classwork • Te	• Quizzes • Self Assessments • Math eacher 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	CoreAlternateResourcesCore ResourcesIEP/504/At-Risk/ESL		ELL Gifted & Core Resources Core F				
Go Math Workbook, IXL, Personal Math Trainer, Math on the Spot Videos, My HRW, Khan Academy, Illustrative Mathematics, Learn360, TeacherTube, BrainPOP, Freckle, LearnZillion, MobyMax, 60 minutes of weekly 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, Go Math Leveled Strategies for English Learners, Go Math Linguistic Support	ST Math Challenge Objectives, G&T tasks, Enrichment worksheets, Art of Problem Solving, Leveled assessments, Go Math Teaching for Depth				
	Supplement	tal Resources					
Technology: • Chromebooks • Online math manip Other:	ulatives						

• Google Classroom, Google Meets, Schoology, Interactive Workbooks • Illustrative Mathematics • insidemathematics.org • National Library of Virtual Manipulatives							
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, modify assessments and/or rubrics. 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 students to related content.				
	Disciplinary Concept(s): Responsible and Contributing Community Member						
NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	Core Ideas:		Curiosity and willingness to try new ideas (intellectual risk taking) contributes to the development of creativity and innovation.				
	Performance Expectation/s:		<b>9.4.5.CI.3</b> : Participate in a brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity.				
	Career Readiness, Life Literacies, & Key Skills Practices						
	Act as a responsible and contributing community member and employee. Attend to financial well-being.						

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