Trimester	Unit Title	Recommended Instructional Days
2	**Understand Division**	**16 - 20 days**

Domain

Strand:

3.OA.A.3 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.

3.OA.A.2 Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe and/or represent a context in which a number of shares or a number of groups can be expressed as 56 ÷ 8.

3.OA.B.6 Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.

3.OA.C.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

3.OA.B.5 Apply properties of operations as strategies to multiply and divide.2 Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)

Key:

 **Major Cluster**  **Supporting Cluster**  **Additional Cluster**

Progress Indicator: ◊ Tests ◊ Homework / Classwork ◊ Projects ◊ Formative assessments ◊Summative 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 NJSLS-CLKS within Unit

Essential Questions:

Lesson 6.1 How can you use the strategy, *act it out,* to solve problems with equal groups?
Lesson 6.2 How can you model a division problem to find how many in each group?
Lesson 6.3 How can you model a division problem to find how many equal groups?
Lesson 6.4 How can you use bar models to solve division problems?
Lesson 6.5 How is division related to subtraction?
Lesson 6.6 How can you use arrays to solve division problems?
Lesson 6.7 How can you use multiplication to divide?
Lesson 6.8 How can you write a set of related multiplication and division facts?
Lesson 6.9 What are the rules for dividing with 1 and 0?

Essential Understandings:

Lesson 6.1 Solve division problems by using the strategy, *act it out*.
Lesson 6.2 Use models to explore the meaning of partitive (sharing) division.
Lesson 6.3 Use models to explore the meaning of quotative (measurement) division.
Lesson 6.4 Model division by using equal groups and bar models.

Lesson 6.5 Use repeated subtraction and a number line to relate subtraction to division.
Lesson 6.6 Model division by using arrays.
Lesson 6.7 Use bar models and arrays to relate multiplication and division as inverse operations.
Lesson 6.8 Write related multiplication and division facts.
Lesson 6.9 Divide using the rules for 1 and 0.

Vocabulary:
- Divide
- Dividend
- Divisor
- Inverse operations
- Quotient
- Related facts

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 6, students develop their understanding of multiplication by writing related facts. These same topics are used often in the development of various science concepts and process skills. Students can make the connection between math and science through the S.T.E.M. activities and activity worksheets found at Think Central.

In Chapter 6, students connect math and science with the S.T.E.M. Activity Cool! It's Freezing! and the accompanying worksheets ((pgs. 107-108) In correlation with ScienceFusion pgs. 118-119)). Through this S.T.E.M. Activity, students will connect to the GO Math! Chapter 6 concepts and skills with various temperature related properties of matter, including calculations using a rate of change. It is recommended that this S.T.E.M. Activity be used after Lesson 6.8.

Science:
1. Discuss the parts of a plant. The roots absorb water and minerals from the soil. The stem carries water and food from the roots to all parts of the plant. The flower grows fruit and seeds for new plants. The leaf makes food with help from the sun. Have students draw pictures of plants and label the four parts described. Then have students write division problems. For example: Gene planted 20 tomato seedlings in 5 equal rows. How many seedlings are in each row?

2. A cell is a very small unit of living matter. Some cells divide. One kind of cell of a mosquito that divides starts as a whole with 6 chromosomes. A chromosome is a thread of gene material. Then the cell makes a copy of the chromosomes and doubles the chromosomes from 6 to 12. Then the cell divides and makes 4 equal cells, dividing the 12 chromosomes equally into each cell. How many chromosomes are in each of the 4 cells? Have students use counters to solve this problem.

3. Sea turtles lay eggs. They usually make their nests at night. They crawl out of the water onto the beach and find a spot above the high tide line to dig. Sea turtles lay up to 9 clutches, or groups, of eggs during a season. They may visit more than one beach to lay their eggs. A sea turtle laid 6 clutches of eggs. She laid 3 clutches on each beach. On how many beaches did she lay eggs?

4. 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?

Social Studies:
1. Washington, D.C., is the capital of the United States. There are many famous landmarks in Washington, D.C. One of the most recognizable landmarks is the White House. The President lives and works at the White House. Other recognizable landmarks include the Washington Monument, the U.S. Capitol, and the Lincoln Memorial. The Lincoln Memorial is always open, and there are people at the monument to answer questions 16 hours each day. If the 16-hour day is separated into 2-hour shifts, how many shifts are there in one day?

2. Many professions use division. One of these professions is a chef. A chef uses division when he or she divides groups of food to make equal servings. Do research to find another profession that uses division. Provide examples of how a person in this profession uses division.

3. People volunteer to help in their communities in many different ways. Some people read stories to children or visit senior citizens. Others clean up trash or plant gardens. Some people volunteer by themselves, and other people form a group. A group of citizens working together shows cooperation as well as volunteerism. Five friends fill 10 bags of trash at a park. If each friend fills the same number of bags, how many bags does each friend fill?

4. 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.

Language Arts:
1. Sports Camp (From the Differentiated Centers Grab and Go Kit)
2. Corey's Cookie Caper (From the Differentiated Centers Grab and Go Kit)
3. The Garden Fence (From the Differentiated Centers Grab and Go Kit)
4. Connect to Reading, Go Math pg. 354

Spot Light On: *Use multiple ways of assessing student understanding.*

Social and Emotional Learning: ***Competencies***	**Social and Emotional Learning:** ***Sub-Competencies***
SEL Competencies: • Self- awareness • Social Awareness • Self- Management • Relationship Skills • Responsible Decision-Making	• 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) ***To show evidence of meeting the standard/s, students will successfully engage within:***	**Assessments (Summative)** ***To show evidence of meeting the standard/s, students will successfully complete:***
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 *Resources/Materials*

Core Resources	**Alternate Core Resources** ***IEP/504/At-Risk/ESL***	**ELL Core Resources**	**Gifted & Talented Core Resources**
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	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

minutes of weekly ST Math, Edulastic, Achieve the Core, Desmos			

Supplemental Resources

Technology:
• Chromebooks • Online math manipulatives
Other:
• Google Classroom, Google Meets, Schoology, Interactive Workbooks • Illustrative Mathematics • insidemathematics.org • National Library of Virtual Manipulatives

Differentiated Student Access to Content:
Recommended *Strategies & Techniques*

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): Impacts of Decisions

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:	**9.4.12.CI.1**: Demonstrate the ability to reflect, analyze, and use creative skills and ideas.
	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*	**x**	Standards in Action: *Climate Change*