








Trimester:	Unit Title:	Recommended Instructional Days:
2	Fractions and Decimals	14 - 17
Domain: The Number System		
<p>Strand:</p> <p> 6.NS.A.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$-cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi?</i></p> <p> 6.NS.B.2 With accuracy and efficiency, divide multi-digit numbers using the standard algorithm.</p> <p> 6.NS.B.3 With accuracy and efficiency, add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.</p> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;"> Major Cluster</div> <div style="text-align: center;"> Supporting Cluster</div> <div style="text-align: center;"> Additional Cluster</div> <div style="text-align: center;"> Climate Change Opportunity</div> </div>		
<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 NJSLS-CLKS within Unit

Essential Questions:

Lesson 2.1: How can you use a model to explain fraction multiplication?

Lesson 2.2: How can you draw a model to explain division of fractions

Lesson 2.3: How can you draw a model to explain division of mixed numbers.?

Lesson 2.4: Why is it necessary to line up the decimal points when adding and subtracting decimals?

Lesson 2.5: How can you multiply decimals with whole numbers and other decimals?

Lesson 2.6: How can dividing whole numbers give a fraction quotient?

Lesson 2.7: How can you use area models to model division of decimals?

Essential Understandings:

Lesson 2.1: Find products involving fractions and mixed numbers.

Lesson 2.2: Compute quotients of fractions and solve problems involving division by fractions.

Lesson 2.3: Compute quotients with mixed numbers and solve problems involving division with mixed numbers.

Lesson 2.4: Add and subtract decimals and solve problems involving addition and subtraction of decimals.

Lesson 2.5: Multiply decimals and solve problems involving multiplication of decimals.

Lesson 2.6: Divide whole numbers and solve problems involving division of whole numbers.

Lesson 2.7: Divide decimals and solve problems involving division of decimals.

Vocabulary:

- reciprocal
- multiplicative inverses

**Encourage students to practice using the unit vocabulary as they talk and write about mathematics. Understanding vocabulary will aid their understanding of the concepts. When students encounter a new definition, encourage them to write in their Big Ideas Student Journals. They will revisit these definitions during the Chapter Review.*

Suggested Activity Descriptions:

- Performance Task TB pg. 43, Space Explorers
- Exploration Activities at the beginning of each section.
- Students analyze sample student answers to compare strategies and approaches for problem solving.
- Students engage in fluency practice resources.
- Students use models to divide fractions, then verifying multiplication and division with models, and finally connecting the operations to why reciprocals can be used in the standard division algorithm for fractions and mixed numbers

<p>Interdisciplinary Connections: Science: 1. Big Ideas STEAM Video and corresponding questions on TB page 43.</p> <p>Social Studies: 1. Example 3 TB pg. 69 2. Example 4 TB pg. 70</p> <p>Language Arts: 1. Closure activity TE pg. T-77</p> <p>Spot Light On: Rachel Carson</p>	
<p>Social and Emotional Learning: <i>Competencies</i></p>	<p>Social and Emotional Learning: <i>Sub-Competencies</i></p>
<p>SEL Competencies:</p> <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.
<p>Assessments (Formative) <i>To show evidence of meeting the standard/s, students will successfully engage within:</i></p>	<p>Assessments (Summative) <i>To show evidence of meeting the standard/s, students will successfully complete:</i></p>
<p>Formative Assessments: • Teacher Observations • Exit Tickets • Quizzes • Self Assessments • Big Ideas Student Journals • Homework/Classwork • Teacher Created Assessments • Progress Monitoring Items • Formative Assessment Tips in Big Ideas Teacher Edition</p>	<p>Benchmarks & Summative Assessments: • Chapter/Unit Assessments • Standardized Tests • Project-based Assessments</p>

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
Big Ideas Student Journal, Dynamic Assessment System, iReady, Khan Academy, Illustrative Mathematics, Learn360, TeacherTube, BrainPOP, Freckle, LearnZillion, MobyMax, 60 minutes of weekly ST Math, Edulastic, Achieve the Core, Desmos	Reteach worksheets, Extra Practice worksheets, Math manipulatives, Scaffolding Instructions in each section of textbook, Tutorial Videos, Skills Review Handbook, Skills Trainer	Dictionary for native language, Video tutorial in native language, ELL Support in each section of Big Ideas Teacher's Edition	ST Math Challenge Objectives, G&T tasks, Enrichment and Extension worksheets, Art of Problem Solving, Leveled assessments
Supplemental Resources			
<p>Technology:</p> <ul style="list-style-type: none"> • Chromebooks • Scientific/Graphing Calculators (upper grades only) • 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.	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,	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 content.

Grade 6 Mathematics
Big Ideas Unit 2: Fractions and Decimals

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	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.		
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NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	Disciplinary Concept(s): Critical Thinking and Problem Solving		
	Core Ideas:	An essential aspect of problem solving is being able to self reflect on why possible solutions for solving problems were or were not successful.	
	Performance Expectation/s:	9.4.8.CT.2: Develop multiple solutions to a problem and evaluate short- and long-term effects to determine the most plausible option.	
	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>	X	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>