Trimester	Unit Title	Recommended Instructional Days
2	**Add and Subtract Fractions**	**10-12 days**

Domain: Number and Operations - Fractions

Strand:

4.NF.A.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as ½ . Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or < .

4.NF.B.3 Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$.

a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.

4.NF.B.3 Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$.

c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.

4.NF.B.3 Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$.

d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

Key:

Major Cluster **Supporting Cluster** **Additional Cluster** **Climate Change Opportunity**

Progress Indicator: ◊ Tests ◊ Homework / Classwork ◊ Projects ◊ Formative assessments ◊ Summative assessments ◊ Performance 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 11.1: How can we add or subtract fractions with like denominators?
Lesson 11.2: How can we add fractions with like denominators using models?
Lesson 11.3: How can we subtract fractions with like denominators using models?
Lesson 11.4: How can we use benchmarks to estimate the sum or difference and determine if the solution is reasonable?
Lesson 11.5: How can we solve real-world problems involving addition and subtraction of fractions?
Lesson 11.6: How can we add and subtract mixed numbers with like denominators?
Lesson 11.7: How can we add fractions with like denominators using the properties of addition?

Essential Understandings:
Lesson 11.1: To add or subtract fractions, they must refer to parts of the same whole.
Lesson 11.2: Using models to add fractions with like denominators helps us visually understand the addition process.
Lesson 11.3: Using models to subtract fractions with like denominators allows us to visualize the subtraction process, making it easier to grasp how parts are taken away from a whole.
Lesson 11.4: Using benchmarks to estimate the sum or difference of fractions helps us quickly gauge the reasonableness of our answers.
Lesson 11.5: Solving real-world problems involving addition and subtraction of fractions allows us to apply our understanding of fractions to practical situations.
Lesson 11.6: Adding and subtracting mixed numbers with like denominators involves combining or separating both the whole numbers and fractional parts.
Lesson 11.7: Using the properties of addition, such as the commutative and associative properties, to add fractions with like denominators helps us understand and apply mathematical principles, making addition more flexible and efficient.

No New Vocabulary

Suggested Activity Description:
Waggle, On the Spot Videos, Tier 2 and 3 Intervention Resources, Vocabulary Activities, Grab and Go Differentiation Kit, Explore and Guided/Independent Practice related to the NJSLS, Essential Question Discussion and Check-In, Share and Show, Basic Skills Review, Manipulative Activity, Reteach Activity, Reading Strategies Activity, Making Connections, Multilingual Support, Performance Task, Enrich Activity, Exit Ticket

Interdisciplinary Connections:
Language Arts:
1. Problem #7 on TB page 435.
2. Problem #9 on TB page 447.
3. Problem #14 on TB page 453.
4. Problem #9 on TB page 459.

Science:
1. UNLOCK the Problem on TB page 437.
2. See Cross-Curricular box on Teacher Edition page 447.

Social Studies:
1. See Cross-Curricular box on Teacher Edition page 447.

Art:
1. Cross-Curricular: Art section on TB page 428.

Spot Light On: *Acknowledge every student's comment or response, even if it's incorrect.*

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 • 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, Interactive Student Edition, ST MATH 60 minutes a week, Waggle, Math on the Spot Videos, iReady, Khan Academy, Illustrative Mathematics, Learn360, TeacherTube, BrainPOP, Freckle, LearnZillion, MobyMax, Achieve the Core, Desmos, RTI	Reteaching worksheets, Skill building workbook, Math manipulatives, iTools, Leveled practice worksheets	Multilingual glossary, eGlossary, Multilingual Activities on ED, Vocabulary Cards, Success for English Learners worksheets, Leveled Strategies for English Learners, Linguistic Support	ST MATH special projects, Enrichment worksheets, Art of Problem Solving, Leveled assessments

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, 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

NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	**Disciplinary Concept(s):** Responsible and Contributing Community Member	
	Core Ideas:	Curiosity and willingness to try new ideas (intellectual risk taking) contributes to the development of creativity and innovation.
	Performance Expectation/s:	**9.4.5.CI.3**: 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.** **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: *Climate Change*