Trimester	Unit Title	Recommended Instructional Days
3	**Compare Fractions**	**14 - 18 days**

Domain

Strand:

3.NF.A.3d Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.

3.NF.A.3a Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.

3.NF.A.3b Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent, e.g., by using a visual fraction model.

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 9.1 How can you use the strategy, *act it out*, to solve comparison problems?
Lesson 9.2 How can you compare fractions with the same denominator?
Lesson 9.3 How can you compare fractions with the same numerator?
Lesson 9.4 What strategies can you use to compare fractions?
Lesson 9.5 How can you compare and order fractions?
Lesson 9.6 How can you use models to find equivalent fractions?
Lesson 9.7 How can you use models to name equivalent fractions?

Essential Understandings:

Lesson 9.1 Solve comparison problems by using the strategy, *act it out*.
Lesson 9.2 Compare fractions with the same denominator by using models and reasoning strategies.
Lesson 9.3 Compare fractions with the same numerator by using models and reasoning strategies.
Lesson 9.4 Compare fractions by using models and strategies involving the size of the pieces in the whole.
Lesson 9.5 Compare and order fractions by using models and reasoning strategies.
Lesson 9.6 Model equivalent fractions by folding paper, using area models, and using number lines.
Lesson 9.7 Generate equivalent fractions by using models.

Vocabulary:

- Equivalent
- Equivalent Fractions

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

◊Suggested Sample Tasks:
Activity Description: Organisms and Their Environments
Interdisciplinary Connections: Math and Science
Content: Hands On Activity: Battle of the Beans
(Unit 5 Lesson 3; Pages 308-310)

Science
Objective: Determine how an animal's body color might affect its ability to survive in its environment.
Skills Assessed:
- Patterns
- Cause and Effect
- Planning and Carrying Out Investigations
- Engaging and Arguing from Evidence

Math
Objective: Collect and organize data to create a bar graph.
Skills Assessed:
- Data in a Table
- Draw a Scaled Bar Graph
- Time With a Stopwatch

Interdisciplinary Connections:

STEM Activity: In Chapter 9, students extend their understanding of comparing fractions by modeling equivalent fractions. These same topics are used often in the development of various science concepts and process skills. Help students make the connection between math, science, and engineering through the S.T.E.M. activities and activity worksheets found at Think Central.

In Chapter 9, students connect math, science, and engineering with the S.T.E.M. Activity Use a Wheel-and-Axle and the accompanying worksheets ((pgs. 113-114) In correlation with ScienceFusion pgs. 214-215.)) Through this S.T.E.M. Activity, students will connect to the GO Math! Chapter 9 concepts and skills with various properties of a wheel, including writing a fraction to indicate how far a wheel turns. It is recommended that this S.T.E.M. Activity will be used after Lesson 9.7.

Science:
1. Limestone is a sedimentary rock often formed in clear, shallow seawater. Suppose a box of limestone rocks has a total weight of 24 ounces. You choose two rocks and find that one is $\frac{1}{4}$ the total weight and the other is $\frac{1}{6}$ the total weight. Use fraction strips to find which rock weighs more. Ask students to justify their reasoning.

Social Studies:
1. Display a map of the United States that shows the names of all 50 states. Have students identify the states that begin with the letter A. Then ask students what fraction of the state names begin with the letter A. Tell students that $\frac{8}{50}$ of the state names begin with the letter M. Ask students whether more state names begin with the letter A or the letter M. Students should explain how they know they are correct. Have students find all the states that begin with the letter M.

Language Arts:
1. The Whole Picture - (From the Differentiated Centers Kit Grab and Go)
2. Pizza Parts - (From the Differentiated Centers Kit Grab and Go)
3. Connect to Reading, Go Math pg. 542

Spot Light On: *Use random response strategies.*

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 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
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	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	Create an enhanced set of introductory activities, integrate active teaching/learning opportunities, incorporate authentic components, propose interest-based extension activities,

	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.	and/or rubric.	and connect students to related content.

NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	**Disciplinary Concept(s):** Work Productively in Teams	
	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*