Lakewood Public School District Curriculum Guide

Grade: 3	Content Area: Mathematics

Original Adoption: Original Adoption: 2023 NJSLS English Language Arts and English as a Second Language (8-21-24); Math NJSLS Mathematics (8-21-24); 2020 NJSLS Science, Social Studies, Career Readiness, Life Literacies & Key Skills, Computer Design & Thinking, Visual & Performing Arts, World Language, Comprehensive Health and Physical Education (5-11-22)
Created By:

Recommended Pacing Guide	
Unit 1: Understanding Multiplication, Facts 0-12	20 days
Unit 2: Addition and Subtraction	22 days
Unit 3: Understanding Fractions	13 days
Unit 4: Understanding Division and the Relationship between Multiplication and Division	16 days
Unit 5: Equivalent Fractions	12 days
Unit 6: Place Value of Numbers within 1000; Rounding	9 days
Unit 7: Measurement	18 days
Unit 8: Perimeter and Area	18 days
Unit 9: Data	9 days
Unit 10: Geometry and Plane Figures	6 days

Alignment with State Mandates

The following colors are used throughout this document to indicate areas in which the curriculum is aligned with the following NJSA requirements:

- Holocaust and genocides (N.J.S.A. 18A:35-28)
- History and contributions of African-Americans (Amistad Law) (N.J.S.A. 18A:35-4.43)
- Highlight and promote diversity and inclusion (Diversity & Inclusion Law) (N.J.S.A. 18A:35-4.36a)
- History of disabled and LGBT persons included in middle and high school curriculum (Section 18A:35-4.35)
- Climate Change - to prepare students to understand how and why climate change happens, the impact it has on our local and global communities and to act in informed and sustainable ways. Please click here for specific examples (by subject).

Lakewood Public School District Curriculum Guide

Grade: 3	Content Area: Mathematics

Unit 1: Understanding Multiplication and Facts 0-12	Duration: 20 days

New Jersey Student Learning Standards	
3.OA.A	**Represent and solve problems involving multiplication and division.**
3.OA.1	Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each.
3.OA.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.C	**Multiply and divide within 100**
3.OA.7	With accuracy and efficiency, 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 end of Grade 3, know from memory all products of two one-digit numbers.

New Jersey Standards for Mathematical Practice	
MP.1	Make sense of problems and persevere in solving them.
MP.2	Reason abstractly and quantitatively.
MP.3	Construct viable arguments and critique the reasoning of others.
MP.4	Model with mathematics.
MP.5	Use appropriate tools strategically.
MP.6	Attend to precision.
MP.7	Look for and make use of structure.
MP.8	Look for and express regularity in repeated reasoning.

New Jersey Social and Emotional Competencies and Sub-Competencies	
Self-Awareness	• Recognize one's feelings and thoughts. • Recognize the impact of one's feelings and thoughts on one's own behavior. • Recognize one's personal traits, strengths, and limitations. • Recognize the importance of self-confidence in handling daily tasks and challenges.

Grade: 3	Content Area: Mathematics

Self-Management	• Understand and practice strategies for managing one's own emotions, thoughts, and behaviors. • Recognize the skills needed to establish and achieve personal and educational goals. • Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals.
Social Awareness	• Recognize and identify the thoughts, feelings, and perspectives of others. • Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds. • Demonstrate an understanding of the need for mutual respect when viewpoints differ. • Demonstrate an awareness of the expectations for social interactions in a variety of settings.
Responsible Decision Making	• Develop, implement, and model effective problem-solving and critical thinking skills. • Identify the consequences associated with one's actions in order to make constructive choices. • Evaluate personal, ethical, safety, and civic impact of decisions.
Relationship Skills	• Establish and maintain healthy relationships. • Utilize positive communication and social skills to interact effectively with others. • Identify ways to resist inappropriate social pressure. • Demonstrate the ability to prevent and resolve interpersonal conflicts in constructive ways. • Identify who, when, where, or how to seek help for oneself or others when needed.

Interdisciplinary Connections	
ELA Standards	
L.RF.3.4	Read with sufficient accuracy and fluency to support comprehension.
L.WF.3.2.	Demonstrate command of the conventions of encoding and spelling.
L.WF.3.3	Demonstrate command of the conventions of writing including those listed under grade two foundational skills.
L.KL.3.1	Use knowledge of language and its conventions when writing, speaking, reading, or listening. **A.** Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases. **B.** Choose words and phrases for effect. **C.** Recognize and observe differences between the conventions of spoken and written English.

SL.PE.3.1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. **A.** Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion. **B.** Follow agreed-upon norms for discussions (e.g., gaining the floor in a respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). **C.** Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. **D.** Explain their own ideas and understanding in light of the discussion.
SL.AS.3.6	Speak in complete sentences when appropriate to tasks and situations in order to provide requested detail or clarification.
Social Studies	
6.1.5.CivicsCM.3	Identify the types of behaviors that promote collaboration and problem solving with others who have different perspectives.

Computer Science & Design Thinking	
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim.
8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of data
8.1.5.DA.4	Organize and present climate change data visually to highlight relationships or support a claim.
8.1.5.AP.1	Compare and refine multiple algorithms for the same task and determine which is most appropriate
8.2.5.ED.2	Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.
8.2.5.ED.3	Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.

Career Readiness, Life Literacies & Key Skills	
9.4.5.CI.3	Participate in brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity.
9.4.5.CT.1	Identify and gather relevant data that will aid in the problem-solving process
9.4.5.CT.3	Describe how digital tools and technology may be used to solve problems.

Grade: 3	**Content Area: Mathematics**

9.4.5.CT.4	Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global.
9.4.5.DC.4	Model safe, legal, and ethical behavior when using online or offline technology
9.4.5.IML.2	Create a visual representation to organize information about a problem or issue
9.4.5.IML.3	Represent the same data in multiple visual formats in order to tell a story about the data.

Career Readiness, Life Literacies, and Key Skills Practices	
CLKS.1	Act as a responsible and contributing community member and employee.
CLKS.2	Attend to financial well-being.
CLKS.3	Consider the environmental, social and economic impacts of decisions.
CLKS.4	Demonstrate creativity and innovation.
CLKS.5	Utilize critical thinking to make sense of problems and persevere in solving them.
CLKS.6	Model integrity, ethical leadership and effective management.
CLKS.7	Plan education and career paths aligned to personal goals.
CLKS.8	Use technology to enhance productivity, increase collaboration and communicate effectively.
CLKS.9	Work productively in teams while using cultural/global competence.

Evidence of Student Learning	
Formative Tasks: ● Teacher observations ● Class discussions ● Whiteboard/Communicators ● Math routine responses ● Daily DOLs ● Daily classwork ● Checks for understanding ● Spiral Quizzes ● Fluency Quizzes ● *Number Talks* ● NJSLA released items	**Alternative Assessments:** ● Oral assessments ● Istation
Summative Assessments: ● Unit Assessment	**Benchmark Assessments:** ● Istation Diagnostic ● Monthly ISIP ● Beginning of the Year Screener

Grade: 3	**Content Area: Mathematics**

Knowledge & Skills

Enduring Understandings:

- Multiplication represents equal groups, and each expression tells a clear story about quantities.
- Visual models such as arrays, groups, and repeated addition help us understand what multiplication means.
- Understanding the meaning of multiplication builds a foundation for solving more complex problems.
- The structure of multiplication allows us to make sense of number relationships in the real world.
- Real-world situations can be represented using multiplication when quantities are grouped equally.
- Drawings, arrays, equations, and models help communicate mathematical thinking and make problems easier to understand.
- Solving word problems requires choosing the operation that fits the situation.
- Strategies such as using patterns, known facts, and properties of operations help build fact fluency.
- Fluency with multiplication facts allows us to solve more complex problems more efficiently.

Essential Questions:

- How can I use groups or arrays to understand what multiplication means?
- How can I picture multiplication to help me solve problems?
- Why is it important to understand what multiplication represents, not just memorize facts?
- What strategies can I use to show my thinking when solving multiplication situations?
- How do properties of multiplication help me solve facts more efficiently?
- What strategies help me become fluent with multiplication?
- Why is fact fluency important for solving more complex math problems?

Content

Students will know…

- Relate the concept of multiplication to “groups of”
- Connect multiplication to equal groups and repeated addition
- Connect arrays to “groups of” and multiplication
- Use addition strategies to find the sum of a repeated addition expression
- Interpret a multiplication expression by creating a visual model
- Represent real-world scenarios with multiplication
- Recognize when a bar model is illustrating multiplication

Skills

Students will be able to …

- Write a repeated addition sentence to match a model
- Write a multiplication expression to match a visual model
- Build and draw a pictorial model for a multiplication sentence.
- Identify the total number of rows or columns in an array and the amount within each row/column
- Use repeated addition to find the total number of objects in an array
- Write/identify a multiplication expression that matches a given array
- Draw visual models for multiplication expressions
- Sketch a bar model to match a given scenario

• Skip-counting can be used to find a product • Apply the commutative property to make multiplication easier. • Understand the relationship between turn-around facts • Develop generalizations for multiplication facts with 0 and 1 • Recognize when we can build on facts we know to find the product for unknown facts.	• Write a multiplication expression to match a bar model. • Solve word problems that require multiplication • Determine whether or not a story matches a given multiplication problem. • Find the product by skip-counting • Identify the turn-around fact • Identify facts we know within facts we do not yet know using visual models and/or equations • Find all products of two one-digit numbers

Core Instructional & Supplemental Materials

Suggested Activities/Resources:
• Manipulatives
• Istation
• District Created Lessons (Unit 1)
• District Created Parent Resources
• Communicators
• Unit Review Jeopardy
• *Number Talks*
• NJSLA released items
	Supplemental Materials
	• Illustrative Mathematics
	  ○ 3.OA.3
	  ○ 3.OA.7

Suggested Accommodations

English Language Learners:

- Multi-sensory instruction
- Flexible grouping
- Small group instruction
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Chunking information
- Scaffolded questioning
- Manipulatives/concrete models
- Pre-Teach vocabulary
- Co-Constructed Word Banks
- Anchor charts
- Gradual release model
- Visual models
- Hands-on activities
- Native language support when possible
- Sheltered English Instruction Strategies
- Sentence starters

Special Education/Students with Disabilities:

- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all IEP modifications
- Calculators
- Manipulatives/concrete models
- Directions repeated, clarified, and reworded
- Breakdown task into manageable parts

504 Plans:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Calculators
- Manipulatives/concrete models
- Follow all 504 modifications

Gifted and Talented:
- Higher level questioning
- Enriched assignments
- Tiered assignments
- Choice board to extend learning
- NJSLA released items

Students at Risk of Failure:
- Provide peer tutoring
- Use a strong student as a “buddy”
- Allow extra time to complete assignments or tests
- Work in a small group
- One on one instruction
- Provide immediate praise and feedback
- Create a nurturing environment
- Provide visuals
- Be flexible with assignments and time frames
- Provide needed academic resources
- Chunking information
- Scaffolded questioning
- Tiered activities
- Manipulatives/concrete models
- Modified assignments
- Brain breaks

Economically Disadvantaged:
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters

Grade: 3	Content Area: Mathematics

- Prompting and cueing
- Activate schema
- Build background knowledge

Culturally Diverse:

- Create an emotionally positive classroom climate.
- Create effective communication
- Model and teach cultural respect
- Build relationships with students by interviewing students to understand their background

Unit 2: Addition and Subtraction	Duration: 22 days

New Jersey Student Learning Standards	
3.NBT.A	**Use place value understanding and properties of operations to perform multi-digit arithmetic**
3.NBT.2	With accuracy and efficiency, add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
3.OA.D	**Solve problems involving the four operations, and identify and explain patterns in arithmetic**
3.OA.8	Solve two-step word problems, including problems involving money, 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.

New Jersey Standards for Mathematical Practice	
MP.1	Make sense of problems and persevere in solving them.
MP.2	Reason abstractly and quantitatively.
MP.3	Construct viable arguments and critique the reasoning of others.
MP.4	Model with mathematics.
MP.5	Use appropriate tools strategically.
MP.6	Attend to precision.
MP.7	Look for and make use of structure.
MP.8	Look for and express regularity in repeated reasoning.

Grade: 3	Content Area: Mathematics

New Jersey Social and Emotional Competencies and Sub-Competencies	
Self-Awareness	● Recognize one's feelings and thoughts. ● Recognize the impact of one's feelings and thoughts on one's own behavior. ● Recognize one's personal traits, strengths, and limitations. ● Recognize the importance of self-confidence in handling daily tasks and challenges.
Self-Management	● Understand and practice strategies for managing one's own emotions, thoughts, and behaviors. ● Recognize the skills needed to establish and achieve personal and educational goals. ● Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals.
Social Awareness	● Recognize and identify the thoughts, feelings, and perspectives of others. ● Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds. ● Demonstrate an understanding of the need for mutual respect when viewpoints differ. ● Demonstrate an awareness of the expectations for social interactions in a variety of settings.
Responsible Decision Making	● Develop, implement, and model effective problem-solving and critical thinking skills. ● Identify the consequences associated with one's actions in order to make constructive choices. ● Evaluate personal, ethical, safety, and civic impact of decisions.
Relationship Skills	● Establish and maintain healthy relationships. ● Utilize positive communication and social skills to interact effectively with others. ● Identify ways to resist inappropriate social pressure. ● Demonstrate the ability to prevent and resolve interpersonal conflicts in constructive ways. ● Identify who, when, where, or how to seek help for oneself or others when needed.

Interdisciplinary Connections	
ELA Standards	
L.RF.3.4	Read with sufficient accuracy and fluency to support comprehension.
L.WF.3.2.	Demonstrate command of the conventions of encoding and spelling.
L.WF.3.3	Demonstrate command of the conventions of writing including those listed under

	grade two foundational skills.
L.KL.3.1	Use knowledge of language and its conventions when writing, speaking, reading, or listening. **A.** Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases. **B.** Choose words and phrases for effect. **C.** Recognize and observe differences between the conventions of spoken and written English.
SL.PE.3.1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. **A.** Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion. **B.** Follow agreed-upon norms for discussions (e.g., gaining the floor in a respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). **C.** Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. **D.** Explain their own ideas and understanding in light of the discussion.
SL.AS.3.6	Speak in complete sentences when appropriate to tasks and situations in order to provide requested detail or clarification.
Social Studies	
6.1.5.CivicsCM.3	Identify the types of behaviors that promote collaboration and problem solving with others who have different perspectives.

Computer Science & Design Thinking	
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim.
8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of data
8.1.5.DA.4	Organize and present climate change data visually to highlight relationships or support a claim.
8.1.5.AP.1	Compare and refine multiple algorithms for the same task and determine which is most appropriate
8.2.5.ED.2	Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.
8.2.5.ED.3	Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.

Grade: 3	Content Area: Mathematics

Career Readiness, Life Literacies & Key Skills	
9.4.5.CI.3	Participate in brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity.
9.4.5.CT.1	Identify and gather relevant data that will aid in the problem-solving process
9.4.5.CT.3	Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4	Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global.
9.4.5.DC.4	Model safe, legal, and ethical behavior when using online or offline technology
9.4.5.IML.2	Create a visual representation to organize information about a problem or issue
9.4.5.IML.3	Represent the same data in multiple visual formats in order to tell a story about the data.

Career Readiness, Life Literacies, and Key Skills Practices	
CLKS.1	Act as a responsible and contributing community member and employee.
CLKS.2	Attend to financial well-being.
CLKS.3	Consider the environmental, social and economic impacts of decisions.
CLKS.4	Demonstrate creativity and innovation.
CLKS.5	Utilize critical thinking to make sense of problems and persevere in solving them.
CLKS.6	Model integrity, ethical leadership and effective management.
CLKS.7	Plan education and career paths aligned to personal goals.
CLKS.8	Use technology to enhance productivity, increase collaboration and communicate effectively.
CLKS.9	Work productively in teams while using cultural/global competence.

Evidence of Student Learning	
Formative Tasks: • Teacher observations • Class discussions • Whiteboard/Communicators • Math routine responses • Daily DOLs • Daily classwork • Checks for understanding • Spiral Quizzes • Fluency Quizzes	**Alternative Assessments:** • Oral assessments • Istation

● *Number Talks* ● NJSLA released items	
Summative Assessments: ● Unit Assessment	**Benchmark Assessments:** ● Istation Diagnostic ● Monthly ISIP

Knowledge & Skills	
Enduring Understandings: ● Place value helps us understand how numbers work and guides efficient addition and subtraction. ● Numbers can be broken apart (decomposed) and put together (recomposed) in different ways to make calculations easier. ● Efficient strategies – such as using place value, properties of operations, and mental math – support accuracy and flexibility. ● Understanding how addition and subtraction are connected helps us solve problems using multiple approaches. ● Many real-world problems require more than one step or operation to solve. ● Understanding the situation helps us determine which operations to use and in which order. ● Equations, models, and visual representations help organize our thinking.	**Essential Questions:** ● How does understanding place value help me add and subtract larger numbers? ● Why are there different strategies for adding and subtracting, and how do I choose the most efficient one? ● How can I break apart a number to make addition and subtraction easier? ● How do I know which operations to use when solving a two-step word problem? ● Why is it important to read carefully and understand each part of a word problem? ● How can models, pictures, or equations help me to organize the steps in a problem?
Content *Students will know…* ● A three-digit number represents an amount of hundreds, tens, and ones. ● Three-digit numbers can be represented with base-10 blocks. ● Expanded form shows the value of each digit written as an addition equation ● Place value can be used when adding or subtracting two three-digit numbers. ● When adding three-digit numbers, we add hundreds to hundreds, tens to tens, and ones to ones.	**Skills** *Students will be able to …* ● Build 3-digit numbers with base-10 blocks. ● Write numbers in standard and expanded form. ● Identify the number that has been built with base-10 blocks. ● Add two three-digit numbers using partial-sums. ● Model addition with base-10 blocks. ● Build two models to represent the same number. ● Subtract two-three digit numbers using partial-differences.

Grade: 3	Content Area: Mathematics

● When subtracting three-digit numbers, we subtract hundreds from hundreds, tens from tens, and ones from ones. ● A ten is composed of 10 ones. ● A hundred is composed of 10 tens. ● Numbers can be represented in more than one way. ● Exchanges can be made between place values to make subtraction possible. ● Bar models can be used to visualize the relationship between the numbers given and the unknown amount you are looking for in a word problem. ● Bar models help us determine which operations we need to use to solve the problem.	● Model subtraction with base-10 blocks. ● Match a scenario to a given bar model. ● Match a bar model to a scenario ● Sketch a bar model to match a word problem. ● Use addition and subtraction strategies to solve one- and two-step word problems, including comparison word problems.

Core Instructional & Supplemental Materials

Suggested Activities/Resources:	Supplemental Materials
● Manipulatives ● Istation ● District Created Lessons (Unit 2) ● District Created Parent Resources ● Communicators ● Unit Review Jeopardy ● *Number Talks* ● NJSLA released items	● Illustrative Mathematics ○ 3.NBT.2 ○ 3.OA.8 ● *100 Snowmen* by Jen Arena

Suggested Accommodations

English Language Learners:

- Multi-sensory instruction
- Flexible grouping
- Small group instruction
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Chunking information
- Scaffolded questioning
- Manipulatives/concrete models
- Pre-Teach vocabulary
- Co-Constructed Word Banks
- Anchor charts
- Gradual release model
- Visual models
- Hands-on activities

- Native language support when possible
- Sheltered English Instruction Strategies
- Sentence starters

Special Education/Students with Disabilities:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all IEP modifications
- Calculators
- Manipulatives/concrete models
- Directions repeated, clarified, and reworded
- Breakdown task into manageable parts

504 Plans:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Calculators
- Manipulatives/concrete models
- Follow all 504 modifications

Gifted and Talented:
- Higher level questioning
- Enriched assignments
- Tiered assignments
- Choice board to extend learning
- NJSLA released items

Students at Risk of Failure:
- Provide peer tutoring
- Use a strong student as a “buddy”
- Allow extra time to complete assignments or tests
- Work in a small group
- One on one instruction
- Provide immediate praise and feedback
- Create a nurturing environment
- Provide visuals
- Be flexible with assignments and time frames
- Provide needed academic resources
- Chunking information
- Scaffolded questioning
- Tiered activities
- Manipulatives/concrete models
- Modified assignments
- Brain breaks

Economically Disadvantaged:
- Pre-teach vocabulary using visuals and gestures
- Chunk texts

Grade: 3	Content Area: Mathematics

- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

Culturally Diverse:

- Create an emotionally positive classroom climate.
- Create effective communication
- Model and teach cultural respect
- Build relationships with students by interviewing students to understand their background

Unit 3: Understanding Fractions	Duration: 13 days

New Jersey Student Learning Standards	
3.NF.A	**Develop understanding of fractions as numbers.**
3.NF.1	Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.
3.NF.2	Understand a fraction as a number on the number line; represent fractions on a number line diagram. a. Represent a fraction $\frac{1}{b}$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $\frac{1}{b}$ on the number line. b. Represent a fraction $\frac{a}{b}$ on a number line diagram by marking off a lengths $\frac{1}{b}$ from 0. Recognize that the resulting interval has a size $\frac{a}{b}$ and that its endpoint locates the number $\frac{a}{b}$ on the number line.
3.NF.3	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. d. 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 with the support of a visual fraction model.
3.G.A	**Reason with shapes and their attributes.**

Grade: 3	Content Area: Mathematics

3.G.2	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.

New Jersey Standards for Mathematical Practice	
MP.1	Make sense of problems and persevere in solving them.
MP.2	Reason abstractly and quantitatively.
MP.3	Construct viable arguments and critique the reasoning of others.
MP.4	Model with mathematics.
MP.5	Use appropriate tools strategically.
MP.6	Attend to precision.
MP.7	Look for and make use of structure.
MP.8	Look for and express regularity in repeated reasoning.

New Jersey Social and Emotional Competencies and Sub-Competencies	
Self-Awareness	● Recognize one's feelings and thoughts. ● Recognize the impact of one's feelings and thoughts on one's own behavior. ● Recognize one's personal traits, strengths, and limitations. ● Recognize the importance of self-confidence in handling daily tasks and challenges.
Self-Management	● Understand and practice strategies for managing one's own emotions, thoughts, and behaviors. ● Recognize the skills needed to establish and achieve personal and educational goals. ● Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals.
Social Awareness	● Recognize and identify the thoughts, feelings, and perspectives of others. ● Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds. ● Demonstrate an understanding of the need for mutual respect when viewpoints differ. ● Demonstrate an awareness of the expectations for social interactions in a variety of settings.
Responsible Decision Making	● Develop, implement, and model effective problem-solving and critical thinking skills. ● Identify the consequences associated with one's actions in order to make constructive choices. ● Evaluate personal, ethical, safety, and civic impact of decisions.

Grade: 3	Content Area: Mathematics

Relationship Skills	• Establish and maintain healthy relationships. • Utilize positive communication and social skills to interact effectively with others. • Identify ways to resist inappropriate social pressure. • Demonstrate the ability to prevent and resolve interpersonal conflicts in constructive ways. • Identify who, when, where, or how to seek help for oneself or others when needed.

Interdisciplinary Connections	
ELA Standards	
L.RF.3.4	Read with sufficient accuracy and fluency to support comprehension.
L.WF.3.2.	Demonstrate command of the conventions of encoding and spelling.
L.WF.3.3	Demonstrate command of the conventions of writing including those listed under grade two foundational skills.
L.KL.3.1	Use knowledge of language and its conventions when writing, speaking, reading, or listening. **A.** Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases. **B.** Choose words and phrases for effect. **C.** Recognize and observe differences between the conventions of spoken and written English.
SL.PE.3.1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. **A.** Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion. **B.** Follow agreed-upon norms for discussions (e.g., gaining the floor in a respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). **C.** Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. **D.** Explain their own ideas and understanding in light of the discussion.
SL.AS.3.6	Speak in complete sentences when appropriate to tasks and situations in order to provide requested detail or clarification.
Social Studies	
6.1.5.CivicsCM.3	Identify the types of behaviors that promote collaboration and problem solving with others who have different perspectives.

Grade: 3	Content Area: Mathematics

Computer Science & Design Thinking	
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim.
8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of data
8.1.5.DA.4	Organize and present climate change data visually to highlight relationships or support a claim.
8.1.5.AP.1	Compare and refine multiple algorithms for the same task and determine which is most appropriate
8.2.5.ED.2	Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.
8.2.5.ED.3	Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.

Career Readiness, Life Literacies & Key Skills	
9.4.5.CI.3	Participate in brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity.
9.4.5.CT.1	Identify and gather relevant data that will aid in the problem-solving process
9.4.5.CT.3	Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4	Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global.
9.4.5.DC.4	Model safe, legal, and ethical behavior when using online or offline technology
9.4.5.IML.2	Create a visual representation to organize information about a problem or issue
9.4.5.IML.3	Represent the same data in multiple visual formats in order to tell a story about the data.

Career Readiness, Life Literacies, and Key Skills Practices	
CLKS.1	Act as a responsible and contributing community member and employee.
CLKS.2	Attend to financial well-being.
CLKS.3	Consider the environmental, social and economic impacts of decisions.
CLKS.4	Demonstrate creativity and innovation.
CLKS.5	Utilize critical thinking to make sense of problems and persevere in solving them.

Grade: 3	**Content Area: Mathematics**

CLKS.6	Model integrity, ethical leadership and effective management.
CLKS.7	Plan education and career paths aligned to personal goals.
CLKS.8	Use technology to enhance productivity, increase collaboration and communicate effectively.
CLKS.9	Work productively in teams while using cultural/global competence.

Evidence of Student Learning	
Formative Tasks: ● Teacher observations ● Class discussions ● Whiteboard/Communicators ● Math routine responses ● Daily DOLs ● Daily classwork ● Checks for understanding ● Spiral Quizzes ● Fluency Quizzes ● *Number Talks* ● NJSLA released items	**Alternative Assessments:** ● Oral assessments ● Istation
Summative Assessments: ● Unit Assessment	**Benchmark Assessments:** ● Istation Diagnostic ● Monthly ISIP

Knowledge & Skills	
Enduring Understandings: ● Fractions represent equal parts of a whole, set or length. ● The numerator and denominator each have specific meanings that help us understand the size and number of parts. ● Visual models deepen our understanding of how fractions are formed and compared. ● Fractions are numbers that can be placed on a number line just like whole numbers. ● The number line shows fractions as distances from zero, helping us compare and understand them. ● Dividing the number line into equal parts creates a meaningful representation of fractional values.	**Essential Questions:** ● What does a fraction tell me about the whole and its parts? ● How can I use models to show and understand fractions? ● Why must all the parts of the whole be equal in size? ● How can I show fractions on a number line? ● How does placing fractions on a number line help me understand them as numbers? ● What does the distance between 0 and a fraction tell me? ● Why is a number line an important tool for comparing and understanding fractions? ● How can models help me compare fractions?

● Number line models reveal the relationship between fractions and whole numbers. ● Comparing fractions requires considering the size of the whole and the number of equal parts. ● Visual models and number lines help us justify and explain comparisons. ● A unit fraction represents one equal part of a whole, and the number of parts determines the denominator. ● The size of each fractional part depends on how many equal parts the whole is divided into.	● What strategies help me decide if fractions are equivalent or if one is greater? ● How can I divide a shape into equal parts, and how do I know the parts are truly equal? ● What does a unit fraction tell me about the size of each part compared to the whole? ● How does partitioning a shape help me understand fractions? ● Why is it important that the whole stays the same when comparing fractional parts?
Content *Students will know…* ● The name of each fractional piece is based on the whole. ● Understand the meaning of the numerator, ● Understand the meaning of the denominator. ● Use fraction notation to record fractional quantities. ● Understand that a mixed number is comprised of a wholes and a fractional piece. ● Understand that an improper fraction is a fraction that is larger than one whole. ● Improper fractions and mixed numbers can be used to name equivalent quantities. ● When comparing fractions with like denominators, we can consider the numerator. ● When comparing fractions with like numerators, we can consider the denominator. ● On a number line, the space between each number can be partitioned further to represent a fractional value. ● The amount of a fraction is not fixed; it is based on the whole that is being referenced.	**Skills** *Students will be able to …* ● Concretely model fractions using fraction circles. ● Create wholes to determine the size of a given fractional piece using fraction circles. ● Name a fraction when shown a model with fraction circles. ● Record the fraction notation for a fraction model. ● Build improper fractions and mixed numbers with fraction circles. ● Rename improper fractions as mixed numbers. ● Rename mixed numbers as improper fractions. ● Use the symbols <, =, and > to write comparison statements about fractions. ● Build models to accurately compare fractions. ● Reason about the size of a fraction to accurately make a comparison. ● Partition a number line to match a given fraction. ● Plot a fraction on a number line. ● Plot an improper fraction on a number line. ● Identify the fraction that is plotted on a number line. ● Compare fractions that are based on different wholes. ● Draw visual models to make fraction comparisons.

Grade: 3	Content Area: Mathematics

Core Instructional & Supplemental Materials

Suggested Activities/Resources:

- Manipulatives
- Istation
- District Created Lessons (Unit 3)
- District Created Parent Resources
- Communicators
- Unit Review Jeopardy
- *Number Talks*
- NJSLA released items

Supplemental Materials

- Illustrative Mathematics
  - 3.NF.1
  - 3.NF.2
  - 3.NF.3d
- *Eating Fractions* by Bruce McMillan
- *The Lion's Share* by Matthew McElligott

Suggested Accommodations

English Language Learners:

- Multi-sensory instruction
- Flexible grouping
- Small group instruction
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- Chunking information
- Scaffolded questioning
- Manipulatives/concrete models
- Pre-Teach vocabulary
- Co-Constructed Word Banks
- Anchor charts
- Gradual release model
- Visual models
- Hands-on activities
- Native language support when possible
- Sheltered English Instruction Strategies
- Sentence starters

Special Education/Students with Disabilities:

- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all IEP modifications
- Calculators
- Manipulatives/concrete models
- Directions repeated, clarified, and reworded
- Breakdown task into manageable parts

504 Plans:

- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated

- Calculators
- Manipulatives/concrete models
- Follow all 504 modifications

Gifted and Talented:
- Higher level questioning
- Enriched assignments
- Tiered assignments
- Choice board to extend learning
- NJSLA released items

Students at Risk of Failure:
- Provide peer tutoring
- Use a strong student as a “buddy”
- Allow extra time to complete assignments or tests
- Work in a small group
- One on one instruction
- Provide immediate praise and feedback
- Create a nurturing environment
- Provide visuals
- Be flexible with assignments and time frames
- Provide needed academic resources
- Chunking information
- Scaffolded questioning
- Tiered activities
- Manipulatives/concrete models
- Modified assignments
- Brain breaks

Economically Disadvantaged:
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

Culturally Diverse:
- Create an emotionally positive classroom climate.
- Create effective communication
- Model and teach cultural respect
- Build relationships with students by interviewing students to understand their background

Grade: 3	Content Area: Mathematics

Unit 4: Properties of Multiplication & the Relationship between Multiplication and Division	Duration: 16 days

New Jersey Student Learning Standards	
3.OA.	**Represent and solve problems involving multiplication and division**
3.OA.2	Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ 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 $56 \div 8$.
3.OA.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.4	Determine the unknown whole number in a multiplication or division equation relating three whole numbers.
3.OA.B	**Understand properties of multiplication and the relationship between multiplication and division.**
3.OA.5	Apply properties of operations as strategies to multiply and divide.
3.OA.6	Understand division as an unknown-factor problem.
3.OA.C	**Multiply and divide within 100**
3.OA.7	With accuracy and efficiency, multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one know $40 \div 5 = 8$) or properties of operations. By end of Grade 3, know from memory all products of two one-digit numbers.
3.OA.D	**Solve problems involving the four operations, and identify and explain patterns in arithmetic**
3.OA.8	Solve two-step word problems, including problems involving money, 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.
3.OA.9	Identify arithmetic patterns (including patterns in the addition table or multiplication table) and explain them using properties of operations.
3.NBT.A	**Use place value understanding and properties of operations to perform multi-digit arithmetic**
3.NBT.3	Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80, 5×60) using strategies based on place value and properties of operations.

Grade: 3	Content Area: Mathematics

New Jersey Standards for Mathematical Practice	
MP.1	Make sense of problems and persevere in solving them.
MP.2	Reason abstractly and quantitatively.
MP.3	Construct viable arguments and critique the reasoning of others.
MP.4	Model with mathematics.
MP.5	Use appropriate tools strategically.
MP.6	Attend to precision.
MP.7	Look for and make use of structure.
MP.8	Look for and express regularity in repeated reasoning.

New Jersey Social and Emotional Competencies and Sub-Competencies	
Self-Awareness	• Recognize one's feelings and thoughts. • Recognize the impact of one's feelings and thoughts on one's own behavior. • Recognize one's personal traits, strengths, and limitations. • Recognize the importance of self-confidence in handling daily tasks and challenges.
Self-Management	• Understand and practice strategies for managing one's own emotions, thoughts, and behaviors. • Recognize the skills needed to establish and achieve personal and educational goals. • Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals.
Social Awareness	• Recognize and identify the thoughts, feelings, and perspectives of others. • Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds. • Demonstrate an understanding of the need for mutual respect when viewpoints differ. • Demonstrate an awareness of the expectations for social interactions in a variety of settings.
Responsible Decision Making	• Develop, implement, and model effective problem-solving and critical thinking skills. • Identify the consequences associated with one's actions in order to make constructive choices. • Evaluate personal, ethical, safety, and civic impact of decisions.
Relationship Skills	• Establish and maintain healthy relationships.

	• Utilize positive communication and social skills to interact effectively with others. • Identify ways to resist inappropriate social pressure. • Demonstrate the ability to prevent and resolve interpersonal conflicts in constructive ways. • Identify who, when, where, or how to seek help for oneself or others when needed.

Interdisciplinary Connections	
ELA Standards	
L.RF.3.4	Read with sufficient accuracy and fluency to support comprehension.
L.WF.3.2.	Demonstrate command of the conventions of encoding and spelling.
L.WF.3.3	Demonstrate command of the conventions of writing including those listed under grade two foundational skills.
L.KL.3.1	Use knowledge of language and its conventions when writing, speaking, reading, or listening. **A.** Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases. **B.** Choose words and phrases for effect. **C.** Recognize and observe differences between the conventions of spoken and written English.
SL.PE.3.1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. **A.** Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion. **B.** Follow agreed-upon norms for discussions (e.g., gaining the floor in a respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). **C.** Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. **D.** Explain their own ideas and understanding in light of the discussion.
SL.AS.3.6	Speak in complete sentences when appropriate to tasks and situations in order to provide requested detail or clarification.
Social Studies	
6.1.5.CivicsCM.3	Identify the types of behaviors that promote collaboration and problem solving with others who have different perspectives.

Computer Science & Design Thinking	
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim.

8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of data
8.1.5.DA.4	Organize and present climate change data visually to highlight relationships or support a claim.
8.1.5.AP.1	Compare and refine multiple algorithms for the same task and determine which is most appropriate
8.2.5.ED.2	Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.
8.2.5.ED.3	Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.

Career Readiness, Life Literacies & Key Skills	
9.4.5.CI.3	Participate in brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity.
9.4.5.CT.1	Identify and gather relevant data that will aid in the problem-solving process
9.4.5.CT.3	Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4	Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global.
9.4.5.DC.4	Model safe, legal, and ethical behavior when using online or offline technology
9.4.5.IML.2	Create a visual representation to organize information about a problem or issue
9.4.5.IML.3	Represent the same data in multiple visual formats in order to tell a story about the data.

Career Readiness, Life Literacies, and Key Skills Practices	
CLKS.1	Act as a responsible and contributing community member and employee.
CLKS.2	Attend to financial well-being.
CLKS.3	Consider the environmental, social and economic impacts of decisions.
CLKS.4	Demonstrate creativity and innovation.
CLKS.5	Utilize critical thinking to make sense of problems and persevere in solving them.
CLKS.6	Model integrity, ethical leadership and effective management.
CLKS.7	Plan education and career paths aligned to personal goals.

Grade: 3	**Content Area: Mathematics**

CLKS.8	Use technology to enhance productivity, increase collaboration and communicate effectively.
CLKS.9	Work productively in teams while using cultural/global competence.

Evidence of Student Learning	
Formative Tasks: ● Teacher observations ● Class discussions ● Whiteboard/Communicators ● Math routine responses ● Daily DOLs ● Daily classwork ● Checks for understanding ● Spiral Quizzes ● Fluency Quizzes ● *Number Talks* ● NJSLA released items	**Alternative Assessments:** ● Oral assessments ● Istation
Summative Assessments: ● Unit Assessment	**Benchmark Assessments:** ● Istation Diagnostic ● Monthly ISIP

Knowledge & Skills	
Enduring Understandings: ● Real-world problems involving equal groups can be represented using multiplication or division. ● Understanding the context of a problem helps determine which operation to use. ● Unknown values in equations can be found using the relationship among numbers. ● Multiplication and division are connected operations that can be used to solve for missing quantities. ● Properties of multiplication (commutative, associative, distributive) provide efficient strategies for solving problems. ● Knowing how facts relate helps solve problems and build fluency. ● Fluency develops through understanding, strategy use, and pattern recognition.	**Essential Questions:** ● How can I tell whether a word problem requires multiplication or division? ● How can I use what I know about multiplication and division to find a missing number? ● How do the properties of multiplication help me solve problems more efficiently? ● How can breaking numbers apart help me multiply? ● How are multiplication and division connected? ● Why is it important to know my multiplication and division facts with accuracy and efficiency? ● How do I know which operations to use when solving a two-step word problem? ● Why is it important to read carefully and understand each part of a word problem?

Grade: 3	**Content Area: Mathematics**

• Efficient strategies such as known facts, properties, and number patterns make solving facts faster and easier. • Many real-world problems require more than one step or operation to solve. • Understanding the situation helps us determine which operations to use and in which order. • Equations, models, and visual representations help organize our thinking.	• How can models, pictures, or equations help me to organize the steps in a problem?
Content *Students will know…* • Given three factors, the associative property tells us that the way in which the factors are grouped does not change the product. • Apply the associative property when multiplying more than two factors to make multiplication efficient. • Extension of multiplication facts refers to the basic facts multiplied by 10 (one or more of the factors is a multiple of 10). • When using the distributive property, think of one of the factors as the sum of two addends, thus creating two easier multiplication problems. • Understand division as a grouping operation. • Represent real-world division scenarios. • Interpret the dividend, divisor, and quotient. • Recognize the relationship between multiplication and division.	**Skills** *Students will be able to …* • Find the product of 3 factors within 9. • Model multiplication problems with base-10 blocks. • Use basic facts to multiply a single-digit number by a multiple of 10. • Sketch a model to show the distributive property. • Write multiplication expressions to represent information given in a word problem. • Solve multiplication word problems. • Model division with manipulatives • Sketch a bar model to match a given word problem. • Solve division word problems. • Determine which scenario matches a given word problem. • Write related equations for multiplication and division. • Create a visual model for a division expression. • Use a visual model and multiplication to solve a division problem. • Use multiplication facts to solve division problems. • Use all four operations to solve two-step word problems.

Core Instructional & Supplemental Materials	

Suggested Activities/Resources:
• Manipulatives
• Istation
• District Created Lessons (Unit 4)
• District Created Parent Resources
• Communicators
	Supplemental Materials
	• Illustrative Mathematics
	  ○ 3.OA.3
	  ○ 3.OA.4
	  ○ 3.OA.5
	  ○ 3.OA.7

• Unit Review Jeopardy • *Number Talks* • NJSLA released items	○ 3.OA.9 ○ 3.NBT.3

Suggested Accommodations

English Language Learners:
- Multi-sensory instruction
- Flexible grouping
- Small group instruction
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- Chunking information
- Scaffolded questioning
- Manipulatives/concrete models
- Pre-Teach vocabulary
- Co-Constructed Word Banks
- Anchor charts
- Gradual release model
- Visual models
- Hands-on activities
- Native language support when possible
- Sheltered English Instruction Strategies
- Sentence starters

Special Education/Students with Disabilities:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all IEP modifications
- Calculators
- Manipulatives/concrete models
- Directions repeated, clarified, and reworded
- Breakdown task into manageable parts

504 Plans:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Calculators
- Manipulatives/concrete models
- Follow all 504 modifications

Gifted and Talented:
- Higher level questioning
- Enriched assignments

Grade: 3	Content Area: Mathematics

- Tiered assignments
- Choice board to extend learning
- NJSLA released items

Students at Risk of Failure:

- Provide peer tutoring
- Use a strong student as a "buddy"
- Allow extra time to complete assignments or tests
- Work in a small group
- One on one instruction
- Provide immediate praise and feedback
- Create a nurturing environment
- Provide visuals
- Be flexible with assignments and time frames
- Provide needed academic resources
- Chunking information
- Scaffolded questioning
- Tiered activities
- Manipulatives/concrete models
- Modified assignments
- Brain breaks

Economically Disadvantaged:

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

Culturally Diverse:

- Create an emotionally positive classroom climate.
- Create effective communication
- Model and teach cultural respect
- Build relationships with students by interviewing students to understand their background

Unit 5: Equivalent Fractions	Duration: 12 days

New Jersey Student Learning Standards	
3.G.A	**Reason with shapes and their attributes**
3.G.2	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.

Grade: 3	Content Area: Mathematics

3.NF.A	Develop understanding of fractions as numbers
3.NF.1	Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.
3.NF.3	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. b. Recognize and generate simple equivalent fractions by reasoning about their size, (e.g., $\frac{1}{2} = \frac{2}{4}, \frac{4}{6} = \frac{2}{3}$). Explain why the fractions are equivalent, e.g., by using a visual fraction model. c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.

New Jersey Standards for Mathematical Practice	
MP.1	Make sense of problems and persevere in solving them.
MP.2	Reason abstractly and quantitatively.
MP.3	Construct viable arguments and critique the reasoning of others.
MP.4	Model with mathematics.
MP.5	Use appropriate tools strategically.
MP.6	Attend to precision.
MP.7	Look for and make use of structure.
MP.8	Look for and express regularity in repeated reasoning.

New Jersey Social and Emotional Competencies and Sub-Competencies	
Self-Awareness	• Recognize one's feelings and thoughts. • Recognize the impact of one's feelings and thoughts on one's own behavior. • Recognize one's personal traits, strengths, and limitations. • Recognize the importance of self-confidence in handling daily tasks and challenges.
Self-Management	• Understand and practice strategies for managing one's own emotions, thoughts, and behaviors. • Recognize the skills needed to establish and achieve personal and educational goals. • Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals.

Grade: 3	Content Area: Mathematics

Social Awareness	• Recognize and identify the thoughts, feelings, and perspectives of others. • Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds. • Demonstrate an understanding of the need for mutual respect when viewpoints differ. • Demonstrate an awareness of the expectations for social interactions in a variety of settings.
Responsible Decision Making	• Develop, implement, and model effective problem-solving and critical thinking skills. • Identify the consequences associated with one's actions in order to make constructive choices. • Evaluate personal, ethical, safety, and civic impact of decisions.
Relationship Skills	• Establish and maintain healthy relationships. • Utilize positive communication and social skills to interact effectively with others. • Identify ways to resist inappropriate social pressure. • Demonstrate the ability to prevent and resolve interpersonal conflicts in constructive ways. • Identify who, when, where, or how to seek help for oneself or others when needed.

Interdisciplinary Connections	
ELA Standards	
L.RF.3.4	Read with sufficient accuracy and fluency to support comprehension.
L.WF.3.2.	Demonstrate command of the conventions of encoding and spelling.
L.WF.3.3	Demonstrate command of the conventions of writing including those listed under grade two foundational skills.
L.KL.3.1	Use knowledge of language and its conventions when writing, speaking, reading, or listening. **A.** Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases. **B.** Choose words and phrases for effect. **C.** Recognize and observe differences between the conventions of spoken and written English.
SL.PE.3.1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. **A.** Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion. **B.** Follow agreed-upon norms for discussions (e.g., gaining the floor in a respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).

	C. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. **D.** Explain their own ideas and understanding in light of the discussion.
SL.AS.3.6	Speak in complete sentences when appropriate to tasks and situations in order to provide requested detail or clarification.
Social Studies	
6.1.5.CivicsCM.3	Identify the types of behaviors that promote collaboration and problem solving with others who have different perspectives.

Computer Science & Design Thinking	
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim.
8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of data
8.1.5.DA.4	Organize and present climate change data visually to highlight relationships or support a claim.
8.1.5.AP.1	Compare and refine multiple algorithms for the same task and determine which is most appropriate
8.2.5.ED.2	Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.
8.2.5.ED.3	Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.

Career Readiness, Life Literacies & Key Skills	
9.4.5.CI.3	Participate in brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity.
9.4.5.CT.1	Identify and gather relevant data that will aid in the problem-solving process
9.4.5.CT.3	Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4	Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global.
9.4.5.DC.4	Model safe, legal, and ethical behavior when using online or offline technology
9.4.5.IML.2	Create a visual representation to organize information about a problem or issue
9.4.5.IML.3	Represent the same data in multiple visual formats in order to tell a story about the data.

Grade: 3	**Content Area: Mathematics**

Career Readiness, Life Literacies, and Key Skills Practices	
CLKS.1	Act as a responsible and contributing community member and employee.
CLKS.2	Attend to financial well-being.
CLKS.3	Consider the environmental, social and economic impacts of decisions.
CLKS.4	Demonstrate creativity and innovation.
CLKS.5	Utilize critical thinking to make sense of problems and persevere in solving them.
CLKS.6	Model integrity, ethical leadership and effective management.
CLKS.7	Plan education and career paths aligned to personal goals.
CLKS.8	Use technology to enhance productivity, increase collaboration and communicate effectively.
CLKS.9	Work productively in teams while using cultural/global competence.

Evidence of Student Learning	
Formative Tasks: ● Teacher observations ● Class discussions ● Whiteboard/Communicators ● Math routine responses ● Daily DOLs ● Daily classwork ● Checks for understanding ● Spiral Quizzes ● Fluency Quizzes ● *Number Talks* ● NJSLA released items	**Alternative Assessments:** ● Oral assessments ● Istation
Summative Assessments: ● Unit Assessment	**Benchmark Assessments:** ● Istation Diagnostic ● Monthly ISIP

Knowledge & Skills

Grade: 3	**Content Area: Mathematics**

Enduring Understandings:	**Essential Questions:**
• Different fractions can represent the same amount when the relationship between the numerator and denominator is proportional. • Visual models help reveal and confirm fraction equivalence. • Equivalent fractions can be generated through the use of visual model and number lines.	• What do the numerator and denominator tell us about a fraction? • How can I use models or pictures to show that two fractions are the same amount? • What strategies can I use to find or prove equivalent fractions? • How do models and number lines help me understand fraction equivalence?
Content *Students will know…* • Equivalent fractions represent the same amount.	**Skills** *Students will be able to …* • Use fraction circles to generate equivalent fractions. • Sketch a visual model to generate equivalent fractions. • Use number lines (fraction strips) to generate equivalent fractions. • Use a double number line to generate equivalent fractions.

Core Instructional & Supplemental Materials	

Suggested Activities/Resources:
• Manipulatives
• Istation
• District Created Lessons (Unit 5)
• District Created Parent Resources
• Communicators
• Unit Review Jeopardy
• *Number Talks*
• NJSLA released items
	Supplemental Materials
	• Illustrative Mathematics
	  ○ 3.G.2
	  ○ 3.NF.1
	  ○ 3.NF.3
	  ○ 3.OA.8

Suggested Accommodations
English Language Learners: • Multi-sensory instruction • Flexible grouping • Small group instruction • Provide peer tutoring • Use a strong student as a “buddy” (does not necessarily have to speak the primary language) • Chunking information • Scaffolded questioning • Manipulatives/concrete models • Pre-Teach vocabulary

- Co-Constructed Word Banks
- Anchor charts
- Gradual release model
- Visual models
- Hands-on activities
- Native language support when possible
- Sheltered English Instruction Strategies
- Sentence starters

Special Education/Students with Disabilities:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all IEP modifications
- Calculators
- Manipulatives/concrete models
- Directions repeated, clarified, and reworded
- Breakdown task into manageable parts

504 Plans:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Calculators
- Manipulatives/concrete models
- Follow all 504 modifications

Gifted and Talented:
- Higher level questioning
- Enriched assignments
- Tiered assignments
- Choice board to extend learning
- NJSLA released items

Students at Risk of Failure:
- Provide peer tutoring
- Use a strong student as a “buddy”
- Allow extra time to complete assignments or tests
- Work in a small group
- One on one instruction
- Provide immediate praise and feedback
- Create a nurturing environment
- Provide visuals
- Be flexible with assignments and time frames
- Provide needed academic resources
- Chunking information
- Scaffolded questioning
- Tiered activities
- Manipulatives/concrete models
- Modified assignments

Grade: 3	Content Area: Mathematics

- Brain breaks

Economically Disadvantaged:
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

Culturally Diverse:
- Create an emotionally positive classroom climate.
- Create effective communication
- Model and teach cultural respect
- Build relationships with students by interviewing students to understand their background

Unit 6: Place Value of Numbers within 1,000; Rounding	Duration: 9 days

New Jersey Student Learning Standards	
3.NBT.A	**Use place value understanding and properties of operations to perform multi-digit arithmetic**
3.NBT.1	Use place value understanding to round whole numbers to the nearest 10 or 100.

New Jersey Standards for Mathematical Practice	
MP.1	Make sense of problems and persevere in solving them.
MP.2	Reason abstractly and quantitatively.
MP.3	Construct viable arguments and critique the reasoning of others.
MP.4	Model with mathematics.
MP.5	Use appropriate tools strategically.
MP.6	Attend to precision.
MP.7	Look for and make use of structure.
MP.8	Look for and express regularity in repeated reasoning.

Grade: 3	Content Area: Mathematics

New Jersey Social and Emotional Competencies and Sub-Competencies	
Self-Awareness	● Recognize one's feelings and thoughts. ● Recognize the impact of one's feelings and thoughts on one's own behavior. ● Recognize one's personal traits, strengths, and limitations. ● Recognize the importance of self-confidence in handling daily tasks and challenges.
Self-Management	● Understand and practice strategies for managing one's own emotions, thoughts, and behaviors. ● Recognize the skills needed to establish and achieve personal and educational goals. ● Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals.
Social Awareness	● Recognize and identify the thoughts, feelings, and perspectives of others. ● Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds. ● Demonstrate an understanding of the need for mutual respect when viewpoints differ. ● Demonstrate an awareness of the expectations for social interactions in a variety of settings.
Responsible Decision Making	● Develop, implement, and model effective problem-solving and critical thinking skills. ● Identify the consequences associated with one's actions in order to make constructive choices. ● Evaluate personal, ethical, safety, and civic impact of decisions.
Relationship Skills	● Establish and maintain healthy relationships. ● Utilize positive communication and social skills to interact effectively with others. ● Identify ways to resist inappropriate social pressure. ● Demonstrate the ability to prevent and resolve interpersonal conflicts in constructive ways. ● Identify who, when, where, or how to seek help for oneself or others when needed.

Interdisciplinary Connections	
ELA Standards	
L.RF.3.4	Read with sufficient accuracy and fluency to support comprehension.
L.WF.3.2.	Demonstrate command of the conventions of encoding and spelling.
L.WF.3.3	Demonstrate command of the conventions of writing including those listed under grade two foundational skills.

Grade: 3	Content Area: Mathematics

L.KL.3.1	Use knowledge of language and its conventions when writing, speaking, reading, or listening. **A.** Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases. **B.** Choose words and phrases for effect. **C.** Recognize and observe differences between the conventions of spoken and written English.
SL.PE.3.1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. **A.** Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion. **B.** Follow agreed-upon norms for discussions (e.g., gaining the floor in a respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). **C.** Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. **D.** Explain their own ideas and understanding in light of the discussion.
SL.AS.3.6	Speak in complete sentences when appropriate to tasks and situations in order to provide requested detail or clarification.
Social Studies	
6.1.5.CivicsCM.3	Identify the types of behaviors that promote collaboration and problem solving with others who have different perspectives.

Computer Science & Design Thinking	
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim.
8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of data
8.1.5.DA.4	Organize and present climate change data visually to highlight relationships or support a claim.
8.1.5.AP.1	Compare and refine multiple algorithms for the same task and determine which is most appropriate
8.2.5.ED.2	Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.
8.2.5.ED.3	Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.

Career Readiness, Life Literacies & Key Skills

Grade: 3	Content Area: Mathematics

9.4.5.CI.3	Participate in brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity.
9.4.5.CT.1	Identify and gather relevant data that will aid in the problem-solving process
9.4.5.CT.3	Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4	Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global.
9.4.5.DC.4	Model safe, legal, and ethical behavior when using online or offline technology
9.4.5.IML.2	Create a visual representation to organize information about a problem or issue
9.4.5.IML.3	Represent the same data in multiple visual formats in order to tell a story about the data.

Career Readiness, Life Literacies, and Key Skills Practices	
CLKS.1	Act as a responsible and contributing community member and employee.
CLKS.2	Attend to financial well-being.
CLKS.3	Consider the environmental, social and economic impacts of decisions.
CLKS.4	Demonstrate creativity and innovation.
CLKS.5	Utilize critical thinking to make sense of problems and persevere in solving them.
CLKS.6	Model integrity, ethical leadership and effective management.
CLKS.7	Plan education and career paths aligned to personal goals.
CLKS.8	Use technology to enhance productivity, increase collaboration and communicate effectively.
CLKS.9	Work productively in teams while using cultural/global competence.

Evidence of Student Learning	
Formative Tasks: ● Teacher observations ● Class discussions ● Whiteboard/Communicators ● Math routine responses ● Daily DOLs ● Daily classwork ● Checks for understanding ● Spiral Quizzes ● Fluency Quizzes ● *Number Talks* ● NJSLA released items	**Alternative Assessments:** ● Oral assessments ● Istation

Grade: 3	**Content Area: Mathematics**

Summative Assessments:	**Benchmark Assessments:**
● Unit Assessment	● Istation Diagnostic ● Monthly ISIP

Knowledge & Skills	
Enduring Understandings: ● Numbers can be rounded to make them easier to work with. ● We can use what we know about place value to decide which benchmark a number is closest to. ● A number line helps me see which benchmark number is nearest. ● Rounding gives an easier number that is close to the original. ● Rounding helps us estimate. ● Many numbers round to the same benchmark.	**Essential Questions:** ● How does place value help us round numbers? ● How do we know which ten or hundred a number is closest to? ● How can a number line help us understand rounding? ● Why might we choose to round a number instead of using the exact number? ● How does rounding help us check if our answer makes sense? ● Why do many numbers round to the same benchmark?
Content *Students will know…* ● Any given number falls between two benchmark numbers. ● Rounding a number means to substitute a “nice” number that is close to the original number.	**Skills** *Students will be able to …* ● Determine the surrounding hundreds for a given number using base-10 blocks. ● Label the surrounding hundreds on an open number line. ● Round a 3-digit number to the nearest hundred. ● Determine the surrounding tens for a given number, using base-10 blocks. ● Label surrounding tens on an open number line. ● Round a 3-digit number to the nearest ten. ● Identify numbers that can be rounded to a given benchmark.

Core Instructional & Supplemental Materials	
Suggested Activities/Resources: ● Manipulatives ● Istation	**Supplemental Materials** ● Illustrative Mathematics ○ 3.NBT.1

Grade: 3	**Content Area: Mathematics**

• District Created Lessons (Unit 6) • District Created Parent Resources • Communicators • Unit Review Jeopardy • *Number Talks* • NJSLA released items	• *Lia & Luis: What has More?* By Ana Crespo • *Place Value* by David. A. Adler • *Great Estimations* by Bruce Goldstone • *Lucky Beans* by Becky Birtha

Suggested Accommodations

English Language Learners:

- Multi-sensory instruction
- Flexible grouping
- Small group instruction
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- Chunking information
- Scaffolded questioning
- Manipulatives/concrete models
- Pre-Teach vocabulary
- Co-Constructed Word Banks
- Anchor charts
- Gradual release model
- Visual models
- Hands-on activities
- Native language support when possible
- Sheltered English Instruction Strategies
- Sentence starters

Special Education/Students with Disabilities:

- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all IEP modifications
- Calculators
- Manipulatives/concrete models
- Directions repeated, clarified, and reworded
- Breakdown task into manageable parts

504 Plans:

- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Calculators
- Manipulatives/concrete models

Grade: 3	Content Area: Mathematics

- Follow all 504 modifications

Gifted and Talented:
- Higher level questioning
- Enriched assignments
- Tiered assignments
- Choice board to extend learning
- NJSLA released items

Students at Risk of Failure:
- Provide peer tutoring
- Use a strong student as a “buddy”
- Allow extra time to complete assignments or tests
- Work in a small group
- One on one instruction
- Provide immediate praise and feedback
- Create a nurturing environment
- Provide visuals
- Be flexible with assignments and time frames
- Provide needed academic resources
- Chunking information
- Scaffolded questioning
- Tiered activities
- Manipulatives/concrete models
- Modified assignments
- Brain breaks

Economically Disadvantaged:
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

Culturally Diverse:
- Create an emotionally positive classroom climate.
- Create effective communication
- Model and teach cultural respect
- Build relationships with students by interviewing students to understand their background

Unit 7: Measurement	Duration: 18 days

New Jersey Student Learning Standards

Grade: 3	Content Area: Mathematics

3.M.A	**Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.**
3.M.1	Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.
3.M.2	Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

New Jersey Standards for Mathematical Practice	
MP.1	Make sense of problems and persevere in solving them.
MP.2	Reason abstractly and quantitatively.
MP.3	Construct viable arguments and critique the reasoning of others.
MP.4	Model with mathematics.
MP.5	Use appropriate tools strategically.
MP.6	Attend to precision.
MP.7	Look for and make use of structure.
MP.8	Look for and express regularity in repeated reasoning.

New Jersey Social and Emotional Competencies and Sub-Competencies	
Self-Awareness	● Recognize one's feelings and thoughts. ● Recognize the impact of one's feelings and thoughts on one's own behavior. ● Recognize one's personal traits, strengths, and limitations. ● Recognize the importance of self-confidence in handling daily tasks and challenges.
Self-Management	● Understand and practice strategies for managing one's own emotions, thoughts, and behaviors. ● Recognize the skills needed to establish and achieve personal and educational goals. ● Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals.
Social Awareness	● Recognize and identify the thoughts, feelings, and perspectives of others. ● Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds.

	● Demonstrate an understanding of the need for mutual respect when viewpoints differ. ● Demonstrate an awareness of the expectations for social interactions in a variety of settings.
Responsible Decision Making	● Develop, implement, and model effective problem-solving and critical thinking skills. ● Identify the consequences associated with one's actions in order to make constructive choices. ● Evaluate personal, ethical, safety, and civic impact of decisions.
Relationship Skills	● Establish and maintain healthy relationships. ● Utilize positive communication and social skills to interact effectively with others. ● Identify ways to resist inappropriate social pressure. ● Demonstrate the ability to prevent and resolve interpersonal conflicts in constructive ways. ● Identify who, when, where, or how to seek help for oneself or others when needed.

Interdisciplinary Connections	
ELA Standards	
L.RF.3.4	Read with sufficient accuracy and fluency to support comprehension.
L.WF.3.2.	Demonstrate command of the conventions of encoding and spelling.
L.WF.3.3	Demonstrate command of the conventions of writing including those listed under grade two foundational skills.
L.KL.3.1	Use knowledge of language and its conventions when writing, speaking, reading, or listening. **A.** Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases. **B.** Choose words and phrases for effect. **C.** Recognize and observe differences between the conventions of spoken and written English.
SL.PE.3.1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. **A.** Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion. **B.** Follow agreed-upon norms for discussions (e.g., gaining the floor in a respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). **C.** Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. **D.** Explain their own ideas and understanding in light of the discussion.

SL.AS.3.6	Speak in complete sentences when appropriate to tasks and situations in order to provide requested detail or clarification.
Social Studies	
6.1.5.CivicsCM.3	Identify the types of behaviors that promote collaboration and problem solving with others who have different perspectives.

Computer Science & Design Thinking	
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim.
8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of data
8.1.5.DA.4	Organize and present climate change data visually to highlight relationships or support a claim.
8.1.5.AP.1	Compare and refine multiple algorithms for the same task and determine which is most appropriate
8.2.5.ED.2	Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.
8.2.5.ED.3	Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.

Career Readiness, Life Literacies & Key Skills	
9.4.5.CI.3	Participate in brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity.
9.4.5.CT.1	Identify and gather relevant data that will aid in the problem-solving process
9.4.5.CT.3	Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4	Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global.
9.4.5.DC.4	Model safe, legal, and ethical behavior when using online or offline technology
9.4.5.IML.2	Create a visual representation to organize information about a problem or issue
9.4.5.IML.3	Represent the same data in multiple visual formats in order to tell a story about the data.

Career Readiness, Life Literacies, and Key Skills Practices

Grade: 3	**Content Area: Mathematics**

CLKS.1	Act as a responsible and contributing community member and employee.
CLKS.2	Attend to financial well-being.
CLKS.3	Consider the environmental, social and economic impacts of decisions.
CLKS.4	Demonstrate creativity and innovation.
CLKS.5	Utilize critical thinking to make sense of problems and persevere in solving them.
CLKS.6	Model integrity, ethical leadership and effective management.
CLKS.7	Plan education and career paths aligned to personal goals.
CLKS.8	Use technology to enhance productivity, increase collaboration and communicate effectively.
CLKS.9	Work productively in teams while using cultural/global competence.

Evidence of Student Learning	
Formative Tasks: ● Teacher observations ● Class discussions ● Whiteboard/Communicators ● Math routine responses ● Daily DOLs ● Daily classwork ● Checks for understanding ● Spiral Quizzes ● Fluency Quizzes ● *Number Talks* ● NJSLA released items	**Alternative Assessments:** ● Oral assessments ● Istation
Summative Assessments: ● Unit Assessment	**Benchmark Assessments:** ● Istation Diagnostic ● Monthly ISIP

Knowledge & Skills	
Enduring Understandings: ● There are 24 hours in a day. ● There are 60 minutes in an hour. ● We can use clocks to understand how minutes and hours pass. ● Time can be measured, compared, and calculated.	**Essential Questions:** ● How do we read a clock and tell time to the nearest minute? ● How can I figure out how much time has passed between two events? ● Why is it helpful to measure time in minutes and hours? ● What strategies can I use to solve time interval problems?

• Mass and liquid volume describe how heavy something is or how much space a liquid takes up. • Standard units like grams, kilograms, milliliters, and liters help everyone measure the same way. • I can choose the right tool and unit depending on what I'm measuring.	• How do I choose the right tool and unit to measure mass or liquid volume? • What is the difference between mass and volume? • Why do we use standard units like grams, kilograms, milliliters, and liters?
Content *Students will know…* • The relative time of day that events happen. • The numbers on the analog clock represent the hours. • The numbers on the clock represent increments of 5 minutes. • The tick marks on the clock represent minutes. • How to read time shown on an analog clock. • How to read time shown on a digital clock. • Understand and compute elapsed time • Determine the start or end time when given the elapsed time • Use strategies for the four operations to solve word problems about time • The mass of an object can be measured with a scale. • Grams and kilograms are units used to measure mass. • Kilograms are a larger unit than grams. • The volume of an object can be measured in a cylinder. • Liters and milliliters are units used to measure the volume of liquid.	**Skills** *Students will be able to …* • Write time __ : __ • Tell time to the nearest 5 minutes. • Draw the hands on an analog clock to show a given time to the nearest 5 minutes. • Tell time to the nearest 1 minute. • Draw hands on an analog clock to show a given time to the nearest minute. • Use strategies (counting on, complements of 10) to calculate elapsed time. • Record thinking about elapsed time on an open number line. • Sketch a bar model to match a word problem. • Solve word problems using strategies learned for the four operations. • Read a scale to tell the mass of an object. • Read a cylinder to tell the volume of liquid. • Solve word problems that involve units of measure.

Core Instructional & Supplemental Materials	

Suggested Activities/Resources:
• Manipulatives
• Istation
• District Created Lessons (Unit 7)
• District Created Parent Resources
• Communicators
• Unit Review Jeopardy
• *Number Talks*
	Supplemental Materials
	• Illustrative Mathematics
	  ○ 3.M.1
	  ○ 3.M.2
	• *Length* by Henry Pluckrose
	• *Inch by Inch* by Leo Lionni
	• *Lucky Beans* by Becky Birtha
	• *Too Many Cooks* by Karen Alexander

• NJSLA released items	

Suggested Accommodations

English Language Learners:
- Multi-sensory instruction
- Flexible grouping
- Small group instruction
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Chunking information
- Scaffolded questioning
- Manipulatives/concrete models
- Pre-Teach vocabulary
- Co-Constructed Word Banks
- Anchor charts
- Gradual release model
- Visual models
- Hands-on activities
- Native language support when possible
- Sheltered English Instruction Strategies
- Sentence starters

Special Education/Students with Disabilities:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all IEP modifications
- Calculators
- Manipulatives/concrete models
- Directions repeated, clarified, and reworded
- Breakdown task into manageable parts

504 Plans:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Calculators
- Manipulatives/concrete models
- Follow all 504 modifications

Gifted and Talented:
- Higher level questioning
- Enriched assignments
- Tiered assignments
- Choice board to extend learning
- NJSLA released items

Grade: 3	Content Area: Mathematics

Students at Risk of Failure:

- Provide peer tutoring
- Use a strong student as a "buddy"
- Allow extra time to complete assignments or tests
- Work in a small group
- One on one instruction
- Provide immediate praise and feedback
- Create a nurturing environment
- Provide visuals
- Be flexible with assignments and time frames
- Provide needed academic resources
- Chunking information
- Scaffolded questioning
- Tiered activities
- Manipulatives/concrete models
- Modified assignments
- Brain breaks

Economically Disadvantaged:

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

Culturally Diverse:

- Create an emotionally positive classroom climate.
- Create effective communication
- Model and teach cultural respect
- Build relationships with students by interviewing students to understand their background

Unit 8: Perimeter and Area	Duration: 18 days

New Jersey Student Learning Standards	
3.M.B	**Geometric measurement: understand concepts of area and relate area to multiplication and to addition.**
3.M.3	Recognize area as an attribute of plane figures and understand concepts of area measurement. a. A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area.

	b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.
3.M.4	Measure areas by counting unit squares (square cm, square m, square in, square ft, and non-standard units).
3.M.5	Relate area to the operations of multiplication and addition. a. Find the area of a rectangle with whole-number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths. b. Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning. d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.
3.M.C	**Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.**
3.M.6	Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

New Jersey Standards for Mathematical Practice	
MP.1	Make sense of problems and persevere in solving them.
MP.2	Reason abstractly and quantitatively.
MP.3	Construct viable arguments and critique the reasoning of others.
MP.4	Model with mathematics.
MP.5	Use appropriate tools strategically.
MP.6	Attend to precision.
MP.7	Look for and make use of structure.
MP.8	Look for and express regularity in repeated reasoning.

New Jersey Social and Emotional Competencies and Sub-Competencies	
Self-Awareness	● Recognize one's feelings and thoughts. ● Recognize the impact of one's feelings and thoughts on one's own behavior. ● Recognize one's personal traits, strengths, and limitations.

	• Recognize the importance of self-confidence in handling daily tasks and challenges.
Self-Management	• Understand and practice strategies for managing one's own emotions, thoughts, and behaviors. • Recognize the skills needed to establish and achieve personal and educational goals. • Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals.
Social Awareness	• Recognize and identify the thoughts, feelings, and perspectives of others. • Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds. • Demonstrate an understanding of the need for mutual respect when viewpoints differ. • Demonstrate an awareness of the expectations for social interactions in a variety of settings.
Responsible Decision Making	• Develop, implement, and model effective problem-solving and critical thinking skills. • Identify the consequences associated with one's actions in order to make constructive choices. • Evaluate personal, ethical, safety, and civic impact of decisions.
Relationship Skills	• Establish and maintain healthy relationships. • Utilize positive communication and social skills to interact effectively with others. • Identify ways to resist inappropriate social pressure. • Demonstrate the ability to prevent and resolve interpersonal conflicts in constructive ways. • Identify who, when, where, or how to seek help for oneself or others when needed.

Interdisciplinary Connections	
ELA Standards	
L.RF.3.4	Read with sufficient accuracy and fluency to support comprehension.
L.WF.3.2.	Demonstrate command of the conventions of encoding and spelling.
L.WF.3.3	Demonstrate command of the conventions of writing including those listed under grade two foundational skills.
L.KL.3.1	Use knowledge of language and its conventions when writing, speaking, reading, or listening. **A.** Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases. **B.** Choose words and phrases for effect. **C.** Recognize and observe differences between the conventions of spoken and written English.

Grade: 3	Content Area: Mathematics

SL.PE.3.1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. **A.** Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion. **B.** Follow agreed-upon norms for discussions (e.g., gaining the floor in a respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). **C.** Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. **D.** Explain their own ideas and understanding in light of the discussion.
SL.AS.3.6	Speak in complete sentences when appropriate to tasks and situations in order to provide requested detail or clarification.
Social Studies	
6.1.5.CivicsCM.3	Identify the types of behaviors that promote collaboration and problem solving with others who have different perspectives.

Computer Science & Design Thinking	
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim.
8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of data
8.1.5.DA.4	Organize and present climate change data visually to highlight relationships or support a claim.
8.1.5.AP.1	Compare and refine multiple algorithms for the same task and determine which is most appropriate
8.2.5.ED.2	Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.
8.2.5.ED.3	Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.

Career Readiness, Life Literacies & Key Skills	
9.4.5.CI.3	Participate in brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity.
9.4.5.CT.1	Identify and gather relevant data that will aid in the problem-solving process

Grade: 3	**Content Area: Mathematics**

9.4.5.CT.3	Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4	Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global.
9.4.5.DC.4	Model safe, legal, and ethical behavior when using online or offline technology
9.4.5.IML.2	Create a visual representation to organize information about a problem or issue
9.4.5.IML.3	Represent the same data in multiple visual formats in order to tell a story about the data.

Career Readiness, Life Literacies, and Key Skills Practices	
CLKS.1	Act as a responsible and contributing community member and employee.
CLKS.2	Attend to financial well-being.
CLKS.3	Consider the environmental, social and economic impacts of decisions.
CLKS.4	Demonstrate creativity and innovation.
CLKS.5	Utilize critical thinking to make sense of problems and persevere in solving them.
CLKS.6	Model integrity, ethical leadership and effective management.
CLKS.7	Plan education and career paths aligned to personal goals.
CLKS.8	Use technology to enhance productivity, increase collaboration and communicate effectively.
CLKS.9	Work productively in teams while using cultural/global competence.

Evidence of Student Learning	
Formative Tasks: ● Teacher observations ● Class discussions ● Whiteboard/Communicators ● Math routine responses ● Daily DOLs ● Daily classwork ● Checks for understanding ● Spiral Quizzes ● Fluency Quizzes ● *Number Talks* ● NJSLA released items	**Alternative Assessments:** ● Oral assessments ● Istation
Summative Assessments: ● Unit Assessment	**Benchmark Assessments:** ● Istation Diagnostic ● Monthly ISIP ● SGO Assessment

Grade: 3	**Content Area: Mathematics**

Knowledge & Skills

Enduring Understandings:

- Perimeter tells us the distance around a shape.
- Perimeter can be found by adding all the side lengths or using patterns in regular shapes.
- Area tell how much space a flat shape covers.
- Square units are the standard way to measure area.
- Using tiles or square units helps me see and compare the space inside shapes.
- Area can be measured by counting square units that fill a shape without gaps or overlaps.
- Different shapes can have the same area even if they look different.
- Shapes can have the same perimeter but look different.
- Area of a rectangle can be found by multiplying the side lengths.
- The area of an irregular figure can be found by breaking the shape into parts.

Essential Questions:

- What is area, and why do we measure it?
- How do square units help us describe the space inside a shape?
- How can I find the area of a shape using square units?
- Why must the units I use to measure area be the same size?
- How does covering a shape with tiles help me measure its area?
- How does multiplication help me find the area of rectangles?
- How can I break apart shapes to find their total area?
- Why might two shapes have the same area even if they do not look the same?
- What is perimeter, and how can I find it?
- How does changing a shape's side lengths change its perimeter?
- Can two shapes have the same perimeter but look different?

Content

Students will know…

- Two-dimensional figures have linear measurements.
- The perimeter of a figure is the sum of the lengths of its sides.
- Apply the attributes of two-dimensional figures to determine the lengths of the sides of the figure.
- Two-dimensional figures have square measurements.
- The length around a two-dimensional figure and the space inside a two-dimensional figure are different measurements.
- The area of a figure is the measurement of the space inside the figure.
- We use different units for measuring perimeter and area.
- The formula for area is $A = l \times w$

Skills

Students will be able to …

- Find the perimeter of polygons by adding the side lengths.
- Find the area of a rectangle by tiling it with square units.
- Find the area of a rectangle by counting the unit squares.
- Find the area of a rectangle using the formula for area.
- Find the perimeter and the area of the same rectangle.
- Use graph paper to create multiple rectangles with the same perimeter.
- Solve real world problems that include area and perimeter.
- Use graph paper to create multiple rectangles with the same area.
- When given the perimeter of a figure, find a missing side length.
- When given the area of a figure, find a missing side length.

• Rectangles with different dimensions can have the same perimeter and a different area. • Rectangles with different dimensions can have the same area and different perimeters. • Area is additive.	• Find the area of irregular figures by decomposing them into rectangles and applying the area formula.

Core Instructional & Supplemental Materials

Suggested Activities/Resources:
- Manipulatives
- Istation
- District Created Lessons (Unit 8)
- District Created Parent Resources
- Communicators
- Unit Review Jeopardy
- *Number Talks*
- NJSLA released items

Supplemental Materials
- Illustrative Mathematics
  - 3.M.3
  - 3.M.5
- *Sam's Sneaker Squares* by Nat Gabriel
- *Sir Cumference and the Isle of Immeter* by Cindy Neuschwander
- *The Warlord's Kites* by Virginia Pilegard

Suggested Accommodations

English Language Learners:
- Multi-sensory instruction
- Flexible grouping
- Small group instruction
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)
- Chunking information
- Scaffolded questioning
- Manipulatives/concrete models
- Pre-Teach vocabulary
- Co-Constructed Word Banks
- Anchor charts
- Gradual release model
- Visual models
- Hands-on activities
- Native language support when possible
- Sheltered English Instruction Strategies
- Sentence starters

Special Education/Students with Disabilities:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all IEP modifications

- Calculators
- Manipulatives/concrete models
- Directions repeated, clarified, and reworded
- Breakdown task into manageable parts

504 Plans:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Calculators
- Manipulatives/concrete models
- Follow all 504 modifications

Gifted and Talented:
- Higher level questioning
- Enriched assignments
- Tiered assignments
- Choice board to extend learning
- NJSLA released items

Students at Risk of Failure:
- Provide peer tutoring
- Use a strong student as a “buddy”
- Allow extra time to complete assignments or tests
- Work in a small group
- One on one instruction
- Provide immediate praise and feedback
- Create a nurturing environment
- Provide visuals
- Be flexible with assignments and time frames
- Provide needed academic resources
- Chunking information
- Scaffolded questioning
- Tiered activities
- Manipulatives/concrete models
- Modified assignments
- Brain breaks

Economically Disadvantaged:
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

Grade: 3	Content Area: Mathematics

Culturally Diverse:

- Create an emotionally positive classroom climate.
- Create effective communication
- Model and teach cultural respect
- Build relationships with students by interviewing students to understand their background

Unit 9: Data	Duration: 9 days

New Jersey Student Learning Standards	
3.DL.A	**Understand data-based questions and data collection**
3.DL.1	Develop data-based questions and decide what data will answer the question. (e.g. “What size shoe does a 3rd grader wear?”. “How many books does a 3rd grader read?”)
3.DL.2	Collect student-centered data (e.g. collect data on students’ favorite ice cream flavor) or use existing data to answer data-based questions.
3.DL.B	**Represent and interpret data.**
3.DL.3	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs.
3.DL.4	Generate measurement data by measuring lengths and using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units – whole numbers, halves, or quarters.

New Jersey Standards for Mathematical Practice	
MP.1	Make sense of problems and persevere in solving them.
MP.2	Reason abstractly and quantitatively.
MP.3	Construct viable arguments and critique the reasoning of others.
MP.4	Model with mathematics.
MP.5	Use appropriate tools strategically.
MP.6	Attend to precision.
MP.7	Look for and make use of structure.
MP.8	Look for and express regularity in repeated reasoning.

New Jersey Social and Emotional Competencies and Sub-Competencies

Grade: 3	Content Area: Mathematics

Self-Awareness	● Recognize one's feelings and thoughts. ● Recognize the impact of one's feelings and thoughts on one's own behavior. ● Recognize one's personal traits, strengths, and limitations. ● Recognize the importance of self-confidence in handling daily tasks and challenges.
Self-Management	● Understand and practice strategies for managing one's own emotions, thoughts, and behaviors. ● Recognize the skills needed to establish and achieve personal and educational goals. ● Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals.
Social Awareness	● Recognize and identify the thoughts, feelings, and perspectives of others. ● Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds. ● Demonstrate an understanding of the need for mutual respect when viewpoints differ. ● Demonstrate an awareness of the expectations for social interactions in a variety of settings.
Responsible Decision Making	● Develop, implement, and model effective problem-solving and critical thinking skills. ● Identify the consequences associated with one's actions in order to make constructive choices. ● Evaluate personal, ethical, safety, and civic impact of decisions.
Relationship Skills	● Establish and maintain healthy relationships. ● Utilize positive communication and social skills to interact effectively with others. ● Identify ways to resist inappropriate social pressure. ● Demonstrate the ability to prevent and resolve interpersonal conflicts in constructive ways. ● Identify who, when, where, or how to seek help for oneself or others when needed.

Interdisciplinary Connections	
ELA Standards	
L.RF.3.4	Read with sufficient accuracy and fluency to support comprehension.
L.WF.3.2.	Demonstrate command of the conventions of encoding and spelling.
L.WF.3.3	Demonstrate command of the conventions of writing including those listed under grade two foundational skills.

Grade: 3	Content Area: Mathematics

L.KL.3.1	Use knowledge of language and its conventions when writing, speaking, reading, or listening. **A.** Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases. **B.** Choose words and phrases for effect. **C.** Recognize and observe differences between the conventions of spoken and written English.
SL.PE.3.1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. **A.** Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion. **B.** Follow agreed-upon norms for discussions (e.g., gaining the floor in a respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). **C.** Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. **D.** Explain their own ideas and understanding in light of the discussion.
SL.AS.3.6	Speak in complete sentences when appropriate to tasks and situations in order to provide requested detail or clarification.
Social Studies	
6.1.5.CivicsCM.3	Identify the types of behaviors that promote collaboration and problem solving with others who have different perspectives.

Computer Science & Design Thinking	
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim.
8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of data
8.1.5.DA.4	Organize and present climate change data visually to highlight relationships or support a claim.
8.1.5.AP.1	Compare and refine multiple algorithms for the same task and determine which is most appropriate
8.2.5.ED.2	Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.
8.2.5.ED.3	Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.

Career Readiness, Life Literacies & Key Skills

Grade: 3	Content Area: Mathematics

9.4.5.CI.3	Participate in brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity.
9.4.5.CT.1	Identify and gather relevant data that will aid in the problem-solving process
9.4.5.CT.3	Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4	Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global.
9.4.5.DC.4	Model safe, legal, and ethical behavior when using online or offline technology
9.4.5.IML.2	Create a visual representation to organize information about a problem or issue
9.4.5.IML.3	Represent the same data in multiple visual formats in order to tell a story about the data.

Career Readiness, Life Literacies, and Key Skills Practices	
CLKS.1	Act as a responsible and contributing community member and employee.
CLKS.2	Attend to financial well-being.
CLKS.3	Consider the environmental, social and economic impacts of decisions.
CLKS.4	Demonstrate creativity and innovation.
CLKS.5	Utilize critical thinking to make sense of problems and persevere in solving them.
CLKS.6	Model integrity, ethical leadership and effective management.
CLKS.7	Plan education and career paths aligned to personal goals.
CLKS.8	Use technology to enhance productivity, increase collaboration and communicate effectively.
CLKS.9	Work productively in teams while using cultural/global competence.

Evidence of Student Learning	
Formative Tasks: ● Teacher observations ● Class discussions ● Whiteboard/Communicators ● Math routine responses ● Daily DOLs ● Daily classwork ● Checks for understanding ● Spiral Quizzes ● Fluency Quizzes ● *Number Talks* ● NJSLA released items	**Alternative Assessments:** ● Oral assessments ● Istation

Lakewood Public School District Curriculum Guide

Grade: 3	Content Area: Mathematics

Summative Assessments:	Benchmark Assessments:
● Unit Assessment	● Istation Diagnostic ● Monthly ISIP

Knowledge & Skills

Enduring Understandings:

- Graphs help us organize information so we can see patterns and compare data easily.
- Scales on graphs allow us to show large amounts of information more clearly.
- Different types of graphs can tell stories about data in different ways.
- Graphs help us solve real-world problems by showing “how many,” “how many more,” and “how many fewer.”
- Measuring with smaller units helps us be more exact.
- Standard measurement tools allow people to measure in ways everyone understands.
- Line plots help us organize measurement data so we can notice patterns, compare amounts, and solve problems.
- Data collected through careful measurement can help us make decisions and understand the world around us.

Essential Questions:

- How can graphs help me understand and compare information?
- Why might I choose a picture graph or a bar graph to show my data?
- How does using a scale change the way I read and make graphs?
- How can graphs help me answer “how many more” or how many fewer” questions?
- Why do we measure objects carefully using standard units?
- How do smaller units help me measure more precisely?
- How can a line plot help me organize and understand measurement data?
- What can measurement data on a line plot tell me that a list of numbers cannot?
- Which type of data lends itself to being displayed in a picture graph?
- Which type of data lends itself to being displayed in a bar graph?
- Which type of data lends itself to being displayed in a line plot?
- How can we collect information to display in a graph?

Content

Students will know…

- Interpret a picture graph to respond to questions about the data.
- Understand the scale used in a pictograph when each unit represents more than 1.
- Interpret data in order to create a scaled picture graph.
- Interpret a bar graph to respond to questions about the data.
- Understand the scale used in a bar graph.
- Interpret and display data in a bar graph.

Skills

Students will be able to …

- Create a picture graph with given data.
- Respond to questions about data displayed in a picture graph.
- Add and subtract to solve problems about data displayed in a graph (picture, bar, line plot).
- Respond to questions about data displayed in a bar graph.
- Create a bar graph with given data
- Collect data from classmates and display data in a bar graph.

Grade: 3	Content Area: Mathematics

• Use a ruler to measure the length of an object to the nearest half inch. • Interpret a line plot to respond to questions about the data. • Interpret and display data in a line plot. • Use efficient addition and subtraction strategies to respond to questions about data in a graph.	• Measure an object to the nearest half inch. • Respond to questions about data displayed in a line plot. • Create a line plot with given data. • Collect data from classmates and display data in a line plot.

Core Instructional & Supplemental Materials

Suggested Activities/Resources:
- Manipulatives
- Istation
- District Created Lessons (Unit 9)
- District Created Parent Resources
- Communicators
- Unit Review Jeopardy
- *Number Talks*
- NJSLA released items

Supplemental Materials
- Illustrative Mathematics
  - 3.DL.3
- Weather and Climate Graphing Lesson
- *A Girl with a Mind for Math* by Julia Finley Mosca
- *Spaghetti and Meatballs for All!* By Marilyn Burns

Suggested Accommodations

English Language Learners:
- Multi-sensory instruction
- Flexible grouping
- Small group instruction
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Chunking information
- Scaffolded questioning
- Manipulatives/concrete models
- Pre-Teach vocabulary
- Co-Constructed Word Banks
- Anchor charts
- Gradual release model
- Visual models
- Hands-on activities
- Native language support when possible
- Sheltered English Instruction Strategies
- Sentence starters

Special Education/Students with Disabilities:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated

- Follow all IEP modifications
- Calculators
- Manipulatives/concrete models
- Directions repeated, clarified, and reworded
- Breakdown task into manageable parts

504 Plans:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Calculators
- Manipulatives/concrete models
- Follow all 504 modifications

Gifted and Talented:
- Higher level questioning
- Enriched assignments
- Tiered assignments
- Choice board to extend learning
- NJSLA released items

Students at Risk of Failure:
- Provide peer tutoring
- Use a strong student as a “buddy”
- Allow extra time to complete assignments or tests
- Work in a small group
- One on one instruction
- Provide immediate praise and feedback
- Create a nurturing environment
- Provide visuals
- Be flexible with assignments and time frames
- Provide needed academic resources
- Chunking information
- Scaffolded questioning
- Tiered activities
- Manipulatives/concrete models
- Modified assignments
- Brain breaks

Economically Disadvantaged:
- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema

Grade: 3	Content Area: Mathematics

- Build background knowledge

Culturally Diverse:

- Create an emotionally positive classroom climate.
- Create effective communication
- Model and teach cultural respect
- Build relationships with students by interviewing students to understand their background

Unit 10: Geometric Figures	Duration: 6 days

New Jersey Student Learning Standards	
3.G.A	**Reason with shapes and their attributes.**
3.G.1	Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.

New Jersey Standards for Mathematical Practice	
MP.1	Make sense of problems and persevere in solving them.
MP.2	Reason abstractly and quantitatively.
MP.3	Construct viable arguments and critique the reasoning of others.
MP.4	Model with mathematics.
MP.5	Use appropriate tools strategically.
MP.6	Attend to precision.
MP.7	Look for and make use of structure.
MP.8	Look for and express regularity in repeated reasoning.

New Jersey Social and Emotional Competencies and Sub-Competencies

Grade: 3	Content Area: Mathematics

Self-Awareness	● Recognize one's feelings and thoughts. ● Recognize the impact of one's feelings and thoughts on one's own behavior. ● Recognize one's personal traits, strengths, and limitations. ● Recognize the importance of self-confidence in handling daily tasks and challenges.
Self-Management	● Understand and practice strategies for managing one's own emotions, thoughts, and behaviors. ● Recognize the skills needed to establish and achieve personal and educational goals. ● Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals.
Social Awareness	● Recognize and identify the thoughts, feelings, and perspectives of others. ● Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds. ● Demonstrate an understanding of the need for mutual respect when viewpoints differ. ● Demonstrate an awareness of the expectations for social interactions in a variety of settings.
Responsible Decision Making	● Develop, implement, and model effective problem-solving and critical thinking skills. ● Identify the consequences associated with one's actions in order to make constructive choices. ● Evaluate personal, ethical, safety, and civic impact of decisions.
Relationship Skills	● Establish and maintain healthy relationships. ● Utilize positive communication and social skills to interact effectively with others. ● Identify ways to resist inappropriate social pressure. ● Demonstrate the ability to prevent and resolve interpersonal conflicts in constructive ways. ● Identify who, when, where, or how to seek help for oneself or others when needed.

Interdisciplinary Connections	
ELA Standards	
L.RF.3.4	Read with sufficient accuracy and fluency to support comprehension.
L.WF.3.2.	Demonstrate command of the conventions of encoding and spelling.
L.WF.3.3	Demonstrate command of the conventions of writing including those listed under grade two foundational skills.

Grade: 3	Content Area: Mathematics

L.KL.3.1	Use knowledge of language and its conventions when writing, speaking, reading, or listening. **A.** Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases. **B.** Choose words and phrases for effect. **C.** Recognize and observe differences between the conventions of spoken and written English.
SL.PE.3.1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. **A.** Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion. **B.** Follow agreed-upon norms for discussions (e.g., gaining the floor in a respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). **C.** Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. **D.** Explain their own ideas and understanding in light of the discussion.
SL.AS.3.6	Speak in complete sentences when appropriate to tasks and situations in order to provide requested detail or clarification.
Social Studies	
6.1.5.CivicsCM.3	Identify the types of behaviors that promote collaboration and problem solving with others who have different perspectives.

Computer Science & Design Thinking	
8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim.
8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of data
8.1.5.DA.4	Organize and present climate change data visually to highlight relationships or support a claim.
8.1.5.AP.1	Compare and refine multiple algorithms for the same task and determine which is most appropriate
8.2.5.ED.2	Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.
8.2.5.ED.3	Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.

Career Readiness, Life Literacies & Key Skills

Grade: 3	Content Area: Mathematics

9.4.5.CI.3	Participate in brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity.
9.4.5.CT.1	Identify and gather relevant data that will aid in the problem-solving process
9.4.5.CT.3	Describe how digital tools and technology may be used to solve problems.
9.4.5.CT.4	Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global.
9.4.5.DC.4	Model safe, legal, and ethical behavior when using online or offline technology
9.4.5.IML.2	Create a visual representation to organize information about a problem or issue
9.4.5.IML.3	Represent the same data in multiple visual formats in order to tell a story about the data.

Career Readiness, Life Literacies, and Key Skills Practices	
CLKS.1	Act as a responsible and contributing community member and employee.
CLKS.2	Attend to financial well-being.
CLKS.3	Consider the environmental, social and economic impacts of decisions.
CLKS.4	Demonstrate creativity and innovation.
CLKS.5	Utilize critical thinking to make sense of problems and persevere in solving them.
CLKS.6	Model integrity, ethical leadership and effective management.
CLKS.7	Plan education and career paths aligned to personal goals.
CLKS.8	Use technology to enhance productivity, increase collaboration and communicate effectively.
CLKS.9	Work productively in teams while using cultural/global competence.

Evidence of Student Learning	
Formative Tasks: ● Teacher observations ● Class discussions ● Whiteboard/Communicators ● Math routine responses ● Daily DOLs ● Daily classwork ● Checks for understanding ● Spiral Quizzes ● Fluency Quizzes ● *Number Talks* ● NJSLA released items	**Alternative Assessments:** ● Oral assessments ● Istation

Grade: 3	**Content Area: Mathematics**

Summative Assessments:	**Benchmark Assessments:**
● Unit Assessment	● Istation Diagnostic ● Monthly ISIP ● End of Year Assessment

Knowledge & Skills

Enduring Understandings:

- Shapes can be sorted and classified based on their attributes, such as the number of sides, angles, and equal lengths.
- Some shapes share attributes that make them part of the same larger category.
- Understanding the properties of shapes helps us describe, compare, and build geometric figures.
- Even when shapes look different, they may belong in the same category if they share important attributes.
- Classifying shapes helps us recognize patterns and relationships in geometry.

Essential Questions:

- How can I describe different shapes using their sides, angles, and other attributes?
- What does it mean for shapes to be in the same “family” or category?
- How can I tell if two shapes belong in the same category, even if they look different?
- Why is it useful to know a shape’s attributes when comparing or creating shapes?
- How can recognizing shape attributes help me solve geometry problems?

Content

Students will know…

- Shapes can have defining and non-defining attributes.
- Defining attributes can be used to name a shape.
- Shapes can be classified based on their defining attributes.
- Many shapes can belong in one groups based on a shared attribute
- Shapes can be classified in more than one group based on their attributes.

Skills

Students will be able to …

- Draw a figure with a specified attribute.
- Identify shapes that have a specified attribute.
- Identify a shared attribute among shapes and determine which shapes do not belong in the group.
- Differentiate between defining and non-defining attributes.
- Classify shapes based on their attributes.

Core Instructional & Supplemental Materials

Suggested Activities/Resources:

- Manipulatives
- Istation
- District Created Lessons (Unit 10)
- District Created Parent Resources
- Communicators
- Unit Review Jeopardy
- *Number Talks*
- NJSLA released items

Supplemental Materials

- *Flat Shapes! Solid Shapes!* By Katie Durgin-Bruce
- *If You Were a Quadrilateral* by Molly Blaisdell
- *The Greedy Triangle* by Marilyn Burns

Grade: 3	Content Area: Mathematics

Suggested Accommodations

English Language Learners:
- Multi-sensory instruction
- Flexible grouping
- Small group instruction
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)
- Chunking information
- Scaffolded questioning
- Manipulatives/concrete models
- Pre-Teach vocabulary
- Co-Constructed Word Banks
- Anchor charts
- Gradual release model
- Visual models
- Hands-on activities
- Native language support when possible
- Sheltered English Instruction Strategies
- Sentence starters

Special Education/Students with Disabilities:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Follow all IEP modifications
- Calculators
- Manipulatives/concrete models
- Directions repeated, clarified, and reworded
- Breakdown task into manageable parts

504 Plans:
- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Calculators
- Manipulatives/concrete models
- Follow all 504 modifications

Gifted and Talented:
- Higher level questioning
- Enriched assignments
- Tiered assignments
- Choice board to extend learning
- NJSLA released items

Students at Risk of Failure:
- Provide peer tutoring

- Use a strong student as a “buddy”
- Allow extra time to complete assignments or tests
- Work in a small group
- One on one instruction
- Provide immediate praise and feedback
- Create a nurturing environment
- Provide visuals
- Be flexible with assignments and time frames
- Provide needed academic resources
- Chunking information
- Scaffolded questioning
- Tiered activities
- Manipulatives/concrete models
- Modified assignments
- Brain breaks

Economically Disadvantaged:

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cueing
- Activate schema
- Build background knowledge

Culturally Diverse:

- Create an emotionally positive classroom climate.
- Create effective communication
- Model and teach cultural respect
- Build relationships with students by interviewing students to understand their background