Kenilworth Public Schools
Curriculum Guide

Content Area: Math
Grade: 3
BOE Approved: 8/13/12

Revision Date: Fall 2018
Submitted by: Megan Loconte
BOE Revision Approved: 11/12/18

Mathematics- Grade 3 Scope and Sequence

Unit 1- Addition and Subtraction within 1,000	Unit 2- Represent and Interpret Data	Unit 3- Multiplication	Unit 4- Division	Unit 5- Fractions	Unit 6- Measurement	Unit 7- Geometry	Unit 8- Bridging the Gap
Weeks 1-3	Weeks 4-6	Weeks 7-13	Weeks 14-20	Weeks 21-25	Weeks 26-31	Weeks 32- 34	Weeks 35-38
Unit Description: All students will solve problems involving the four operations, and identify and explain patterns in arithmetic. Students will use place value understanding and properties of operations to perform multi-digit arithmetic.	*Unit Description:* All students will represent and interpret data by using different forms of graphs.	*Unit Description*: All students will represent and solve problems involving multiplication. Students will analyze properties of multiplication and begin to explore the relationship between multiplication and division. Students will solve problems involving the four operations, and identify and explain patterns in arithmetic.	*Unit Description:* All students will analyze the properties of multiplication and investigate the relationship between multiplication and division. Students will represent and solve problems involving multiplication and division. Students will multiply and divide within 100.	*Unit Description:* All students will develop an understanding of fractions as numbers.	*Unit Description:* All students will solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	*Unit Description:* All students will describe and analyze two-dimensional shapes and their attributes.	*Unit Description:* In this unit, students will build on Grade 3 skills to prepare for Grade 4 content.

Unit Targets:	Unit Targets:	Unit Targets:	Unit Targets:	Unit Targets:	Unit Targets:	Unit Targets:	Unit Targets:
• Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. • Solve two-step word problems 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 including rounding.	• Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. • Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental	• Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. • 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. • Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5	• Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. • Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.	• Understand a fraction 1/*b* as the quantity formed by 1 part when a whole is partitioned into *b* equal parts; understand a fraction *a*/*b* as the quantity formed by *a* parts of size 1/*b*. • Understand a fraction as a number on the number line; represent fractions on a number line diagram. • Represent a fraction 1/*b* on a number line diagram by defining the interval from 0 to 1 as	• 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. • 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	• 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. • Partition shapes into parts with equal areas. Express the	• Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers. • 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.

Kenilworth Public Schools

• Use place value understanding to round whole numbers to the nearest 10 or 100. • Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	computation and estimation strategies including rounding. • 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. • Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by	groups of 7 objects each. • 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.[1] • Determine the unknown whole number in a multiplication or division equation relating three whole numbers. • Apply properties of operations as strategies to	• 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.[1] • Determine the unknown whole number in a multiplication or division equation relating three whole numbers. • Apply properties of operations as strategies to	the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line. • Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line. • Explain equivalence of fractions in	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. • Generate measurement data by measuring lengths 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. • Recognize area as an attribute of plane figures and	area of each part as a unit fraction of the whole. • Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b. • Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. • Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. • Recognize and	• Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b. • Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. • Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. • Recognize and generate simple equivalent fractions, e.g.,

		multiply and divide. 7. Fluently 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 the end of Grade 3, know from memory all products of two one-digit numbers.	multiply and divide.	special cases, and compare fractions by reasoning about their size.	understand concepts of area measurement.	generate simple equivalent fractions, e.g., $1/2 = 2/4, 4/6 = 2/3$). Explain why the fractions are equivalent, e.g., by using a visual fraction model.	$1/2 = 2/4, 4/6 = 2/3$). Explain why the fractions are equivalent, e.g., by using a visual fraction model.
	making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.		• Understand division as an unknown-factor problem. • Fluently 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 the end of Grade 3, know from memory all products of two one-digit numbers. • Solve two-step word problems using the four operations. Represent	• Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. • Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4, 4/6 = 2/3$). Explain why the fractions are equivalent, e.g., by using a visual fraction model. • Express whole numbers as fractions, and recognize fractions that are equivalent to whole	• 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. • 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. • Measure areas by counting unit squares (square cm, square m, square in, square ft, and non-standard units). • Relate area to the operations of multiplication	• Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. • 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	• Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. • 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 $>$, $=$,
	• Solve two-step word problems 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 including rounding. • Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.	these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	numbers. • Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. • Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the	and addition. • 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. • 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. • Use tiling to show in a concrete case that the area of a rectangle	the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. •	or <, and justify the conclusions, e.g., by using a visual fraction model. • 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. • Understand that shapes in different

| | | | | | whole. | with whole-number side lengths a and b + c is the sum of a × b and a × c. Use area models to represent the distributive property in mathematical reasoning.

• 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.

• Solve real world and mathematical problems involving | | 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.

• Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b) by using visual fraction models, with attention to how the |

					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.		number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. • Understand a fraction a/b with a > 1 as a sum of fractions 1/b. • Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. • Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording

							each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model.
							• Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.
							• Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators,

							e.g., by using visual fraction models and equations to represent the problem.
							• Use decimal notation for fractions with denominators 10 or 100.
							• Know relative sizes of measurement units within one system of units including km, m, cm. mm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two column table.
							• Recognize a line of

							symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.
								• Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.
								• Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of

							the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons
							• Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
							• Find whole-number quotients and remainders with up to four-digit dividends and

							one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Mathematics- Grade 3 Unit 1

Unit title: Addition and Subtraction within 1,000
Unit summary: All students will solve problems involving the four operations, and identify and explain patterns in arithmetic. Students will use place value understanding and properties of operations to perform multi-digit arithmetic.
Primary Interdisciplinary Connections: Language Arts, Technology -8.1 Educational Technology, NJSLSA.R7
21st Century Career and Life Themes: CRP8, CRP 11

Learning Targets

NJSLS Standards: 3.NBT.1-2; 3.OA.8-9
Technology Standards: 8.1 Educational Technology
Content Statements:

1	Solve problems involving the four operations, and identify and explain patterns in arithmetic
2	Use place value understanding and properties of operations to perform multi-digit arithmetic

Big Idea: Different strategies can help us add and subtract.

Unit Essential Questions:	**Unit Enduring Understandings:**
• What strategies can you use to find sums and differences?	• There are a wide variety of strategies to solve addition and subtraction problems.

Unit Learning Targets
Students will…

- Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.
- Solve two-step word problems 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 including rounding.
- Use place value understanding to round whole numbers to the nearest 10 or 100.
- Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

Evidence of Learning

Summative Assessment: Chapter 1 Test; Mid-Chapter Checkpoint
Formative Assessments:

- "Show What You Know"-pgs. 3, 4
- Exit slips
- Quizzes
- Notebook check
- Teacher observation
- Class Participation
- Problem of the day

Lesson Plans	
Activities	*Timeframe*
• Project: *Inventing Toys* (pg. 2) • *Picnic Pattern Path*- game card • *Soccer Bash*-literature • *Roll to 100!*-activity card 1 (orange) • *Mystery numbers*-activity card 5 (purple) • *Auto Addition*-game card Ongoing activities: • Timed Multiplication Quizzes • 180 Days of Math Activities • Interactive Notebook The following Mathematical Practices are to be included in math activities: 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	Weeks 1-3
Teacher Resources	*Teacher Note*
• Textbook • Textbook resource materials • Student Math Boards	Activities can always be used during small group instruction for the use of a math center or during whole group instruction as a mini-

• Place value number cards • Chart • Base-ten blocks • Vocabulary for each chapter • Personal Math Trainer	assessment to check for understanding.

Differentiating Instruction:
Students with Disabilities, English Language Learners,
and Gifted & Talented Students

Examples of Strategies and Practices that Support Students with Disabilities:
• Use of visual and multisensory formats
• Use of assisted technology
• Use of prompts
• Modification of content and student products
• Testing accommodations
• Authentic assessments

Examples of Strategies and Practices that Support Gifted & Talented Students:
• Adjusting the pace of lessons
• Curriculum compacting
• Inquiry-based instruction
• Independent study
• Higher-order thinking skills
• Interest-based content
• Student-driven instruction
• Real-world problems and scenarios

Examples of Strategies and Practices that Support English Language Learners:
• Pre-teaching of vocabulary and concepts
• Visual learning, including graphic organizers
• Use of cognates to increase comprehension
• Teacher modeling
• Pairing students with beginning English language skills with students who have more advanced English language skills
• Scaffolding
•Word walls
•Sentence frames
•Think-pair-share
•Cooperative learning groups

Mathematics- Grade 3 Unit 2

Unit title: Represent and Interpret Data	
Unit summary: All students will represent and interpret data by using different forms of graphs.	
Primary Interdisciplinary Connections: Language Arts, Technology -8.1 Educational Technology, NJSLSA.R7.	
21st Century Career and Life Themes: CRP8, CRP 11	

Learning Targets

NJSLS Standards: 3.NBT.2; 3.OA.8; 3.MD.3-4	
Technology Standards: 8.1 Educational Technology	

Content Statements:

1	Represent and interpret data
2	Use place value understanding and properties of operations to perform multi-digit arithmetic

Big Idea: You can represent and interpret data using different types of graphs.

Unit Essential Questions:	**Unit Enduring Understandings:**
• How can you read and interpret data using any type of graph?	• Learning to organize data will lead to representing and interpreting data for any graph.

Unit Learning Targets
Students will...

- Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
- Solve two-step word problems 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 including rounding.
- 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.
- Generate measurement data by measuring lengths 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.

Evidence of Learning

Summative Assessment: Chapter 2 test; Mid-Chapter Checkpoint	
Formative Assessments:	

- "Show What You Know"-pgs. 59, 60
- Exit slips
- Quizzes
- Notebook check
- Teacher observation
- Class Participation
- Problem of the day

Lesson Plans

Activities	Timeframe
• *And the Survey Says*-activity card 2 (orange) • *Diego's Perfect Fit*-literature • *Life Span Pictographs*-activity card 2 (purple) • *It's in the Bag*-activity card 2 (blue) • *The Class Trip*-literature Ongoing activities: • Timed Multiplication Quizzes • 180 Days of Math Activities • Interactive Notebook The following Mathematical Practices are to be included in math activities: 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	Weeks 4-6
Teacher Resources	*Teacher Note*
• Textbook • Textbook resource materials • Grab-and-Go Differentiated Centers Kit • Student Math Boards • Counters	Activities can always be used during small group instruction for the use of a math center or during whole group instruction as a mini-assessment to check for understanding. Timed Multiplication Quizzes, 180

• Graph paper • Vocabulary for each chapter • Supplemental Teacher Binder • Personal Math Trainer	Days of Math Activities, Drill sheets, and Interactive Notebook pages can be found in the Third Grade Supplemental Activities binder.

Differentiating Instruction:
Students with Disabilities, English Language Learners, and Gifted & Talented Students

Examples of Strategies and Practices that Support Students with Disabilities:
• Use of visual and multisensory formats
• Use of assisted technology
• Use of prompts
• Modification of content and student products
• Testing accommodations
• Authentic assessments

Examples of Strategies and Practices that Support Gifted & Talented Students:
• Adjusting the pace of lessons
• Curriculum compacting
• Inquiry-based instruction
• Independent study
• Higher-order thinking skills
• Interest-based content
• Student-driven instruction
• Real-world problems and scenarios

Examples of Strategies and Practices that Support English Language Learners:
• Pre-teaching of vocabulary and concepts
• Visual learning, including graphic organizers
• Use of cognates to increase comprehension
• Teacher modeling
• Pairing students with beginning English language skills with students who have more advanced English language skills
• Scaffolding
•Word walls
•Sentence frames
•Think-pair-share
•Cooperative learning groups

Mathematics- Grade 3 Unit 3

Unit title: Multiplication
Unit summary: All students will represent and solve problems involving multiplication. Students will analyze properties of multiplication and begin to explore the relationship between multiplication and division. Students will solve problems involving the four operations, and identify and explain patterns in arithmetic.
Primary Interdisciplinary Connections: Language Arts, Technology -8.1 Educational Technology, NJSLSA.R7
21st Century Career and Life Themes: CRP8, CRP 11

Learning Targets

NJSLS Standards: 3.NBT.2-3; 3.OA.1,3-5,7-9
Technology Standards: 8.1 Educational Technology
Content Statements:

1	Represent and solve problems involving multiplication and division.
2	Understand properties of multiplication and the relationship between multiplication and division.
3	Multiply and divide within 100.
4	Solve problems involving the four operations, and identify and explain patterns in arithmetic.
5	Use place value understanding and properties of operations to perform multi-digit arithmetic.

Big Idea: Different strategies can help us compute numbers more efficiently.

Unit Essential Questions:	**Unit Enduring Understandings:**
• What are the different ways to multiply numbers?	• We can learn to multiply by using a number of strategies.

Unit Learning Targets
Students will…

- Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

- 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.

- Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each.

- 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.[1]

- Determine the unknown whole number in a multiplication or division equation relating three

whole numbers.

- Apply properties of operations as strategies to multiply and divide. 7. Fluently 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 the end of Grade 3, know from memory all products of two one-digit numbers.
- Solve two-step word problems 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 including rounding.
- Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.

Evidence of Learning

Summative Assessment: Chapter 3-5 tests; Mid-Chapter Checkpoints

Formative Assessments:

- "Show What You Know"-pgs. 95, 96, 131, 132, 179, 180
- Exit slips
- Quizzes
- Notebook check
- Teacher observation
- Class Participation
- Problem of the day

Lesson Plans

Activities	Timeframe
• *Line 'Em Up*-activity card 7 (blue) • *Collections Times Four*-literature • *Multiplication Bingo*-game card • *Story Time*-activity card 7 (orange) • *Diamond Derby*-activity card 15 (purple) • *The Workshop*-literature • *Hurray for Arrays*!-activity card 15 (blue) • *Factor Spin*-activity card 7 (purple) • *Tic-Tac-Toe Times 6*-activity card 15 (orange) • *The Homework Table*-literature • *Guess My Numbers*-game card • *Ice Cream Incentive* Ongoing activities:	Weeks 7-13

• Timed Multiplication Quizzes • 180 Days of Math Activities • Interactive Notebook The following Mathematical Practices are to be included in math activities: 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	
Teacher Resources	*Teacher Note*
• Textbook • Textbook resource materials • Student Math Boards • Counters • Graph paper • Base-ten blocks • Number line • Vocabulary for each chapter • Supplemental Teacher Binder	Activities can always be used during small group instruction for the use of a math center or during whole group instruction as a mini-assessment to check for understanding. Timed Multiplication Quizzes, 180 Days of Math Activities, Drill sheets, and Interactive Notebook pages can be found in the Third Grade Supplemental Activities binder.

Differentiating Instruction:
Students with Disabilities, English Language Learners,
and Gifted & Talented Students

Examples of Strategies and Practices that Support Students with Disabilities:
• Use of visual and multisensory formats
• Use of assisted technology
• Use of prompts
• Modification of content and student products
• Testing accommodations
• Authentic assessments

Examples of Strategies and Practices that Support Gifted & Talented Students:

• Adjusting the pace of lessons
• Curriculum compacting
• Inquiry-based instruction
• Independent study
• Higher-order thinking skills
• Interest-based content
• Student-driven instruction
• Real-world problems and scenarios

Examples of Strategies and Practices that Support English Language Learners:
• Pre-teaching of vocabulary and concepts
• Visual learning, including graphic organizers
• Use of cognates to increase comprehension
• Teacher modeling
• Pairing students with beginning English language skills with students who have more advanced English language skills
• Scaffolding
•Word walls
•Sentence frames
•Think-pair-share
•Cooperative learning groups

Unit Title: Division

Unit Summary: All students will analyze the properties of multiplication and investigate the relationship between multiplication and division. Students will represent and solve problems involving multiplication and division. Students will multiply and divide within 100.

Primary Interdisciplinary Connections: Language Arts, Technology -8.1 Educational Technology, NJSLSA.R7

21st Century Career and Life Themes: CRP8, CRP 11

21st Century Career and Life Themes: CRP8, CRP 11

Learning Targets

NJSLS Standards: 3.OA.1-8

Technology Standards: 8.1 Educational Technology

Content Statements:

1	Represent and solve problems involving multiplication and division
2	Understand properties of multiplication and the relationship between multiplication and division
3	Multiply and divide within 100
4	Solve problems involving the four operations, and identify and explain patterns in arithmetic
5	Use place value understanding and properties of operations to perform multi-digit arithmetic

Big Idea: Different strategies can help us compute numbers more efficiently.

Unit Essential Questions:	**Unit Enduring Understandings:**
• What are different ways to divide numbers?	• Using a number of strategies, we can learn to divide numbers.

Unit Learning Targets
Students will…

- Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each.
- 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.
- 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.[1]
- Determine the unknown whole number in a multiplication or division equation relating three whole numbers.
- Apply properties of operations as strategies to multiply and divide.

- Understand division as an unknown-factor problem.
- Fluently 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 the end of Grade 3, know from memory all products of two one-digit numbers.
- Solve two-step word problems 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 including rounding.

Evidence of Learning

Summative Assessment: Chapter 6-7 test; Mid-Chapter Checkpoints

Formative Assessments:

- "Show What You Know"-pgs. 207, 208, 251, 252
- Exit slips
- Quizzes
- Notebook check
- Teacher observation
- Class Participation
- Problem of the day

Lesson Plans

Activities	Timeframe
• *Dividing Nickels*-activity card 9 (blue) • *Sports Camp*-literature • *Division MathO!*-activity card 9 (purple) • *Comparing 2 and 5*-activity card 9 (orange) • *Corey's Cookie Caper*-literature • *Missing Sides*-activity card 19 (blue) • *The Garden Fence*-literature • *Division Dilemmas*-activity card 19 (purple) • *All in the Family*-game card Ongoing activities: • Timed Multiplication Quizzes • 180 Days of Math Activities • Interactive Notebook	Weeks 14-20

The following Mathematical Practices are to be included in math activities:

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

Teacher Resources	*Teacher Note*
• Textbook • Textbook resource materials • Student Math Boards • Counters • Graph paper • Base-ten blocks • Number line	Activities can always be used during small group instruction for the use of a math center or during whole group instruction as a mini-assessment to check for understanding. Timed Multiplication Quizzes, 180 Days of Math Activities, Drill sheets, and Interactive Notebook pages can be found in the Third Grade Supplemental Activities binder.

Differentiating Instruction:
Students with Disabilities, English Language Learners, and Gifted & Talented Students

Examples of Strategies and Practices that Support Students with Disabilities:
• Use of visual and multisensory formats
• Use of assisted technology
• Use of prompts
• Modification of content and student products
• Testing accommodations
• Authentic assessments

Examples of Strategies and Practices that Support Gifted & Talented Students:
• Adjusting the pace of lessons
• Curriculum compacting
• Inquiry-based instruction
• Independent study

- Higher-order thinking skills
- Interest-based content
- Student-driven instruction
- Real-world problems and scenarios

Examples of Strategies and Practices that Support English Language Learners:
- Pre-teaching of vocabulary and concepts
- Visual learning, including graphic organizers
- Use of cognates to increase comprehension
- Teacher modeling
- Pairing students with beginning English language skills with students who have more advanced English language skills
- Scaffolding
- Word walls
- Sentence frames
- Think-pair-share
- Cooperative learning groups

Mathematics- Grade 3 Unit 5

Unit Title: Fractions

Unit Summary: All students will develop an understanding of fractions as numbers.

Primary Interdisciplinary Connections: Language Arts, Technology -8.1 Educational Technology, NJSLSA.R7.

21st Century Career and Life Themes: CRP8, CRP 11

Learning Targets

NJSLS Standards: 3.NF.1-3; 3.G.2

Technology Standards: 8.1 Educational Technology

Content Statements:

1	Develop understanding of fractions as numbers.

Big Idea: Different strategies can help us understand the value of a fraction.

Unit Essential Questions:	Unit Enduring Understandings:
• How do determine the value of a fraction?	• Using a variety of strategies can help us determine the value of a fraction.

Unit Learning Targets
Students will…

- Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
- Understand a fraction as a number on the number line; represent fractions on a number line diagram.
- Represent a fraction $1/b$ 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 $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.
- Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.
- Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
- Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.
- Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$). Explain why the fractions are equivalent, e.g., by using a visual fraction model.
- Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.

- Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.
- Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.

Evidence of Learning

Summative Assessment: Chapter 8-9 tests; Mid-Chapter Checkpoints

Formative Assessments:

- "Show What You Know"-pgs. 305, 306, 349, 350
- Exit slips
- Quizzes
- Notebook check
- Teacher observation
- Class Participation
- Problem of the day

Lesson Plans

Activities	Timeframe
- Project-*Coins in the U.S.* (pg. 304) *Fish for Fractions*-activity card 11 (orange) *Pizza Parts!*-literature *The Whole Picture*-literature *Who's the Greatest?*-activity card 11 (purple) *Fraction Action*-game card *Fraction Pizza* Ongoing activities: - Timed Multiplication Quizzes 180 Days of Math Activities - Interactive Notebook The following Mathematical Practices are to be included in math activities: 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others.	Weeks 21-25

4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	
Teacher Resources	*Teacher Note*
• Textbook • Textbook resource materials • Student Math Boards • Fraction circles • Fraction bars • Number line • Graph paper • Vocabulary for each chapter • Supplemental Teacher Binder • Personal Math Trainer	Activities can always be used during small group instruction for the use of a math center or during whole group instruction as a mini-assessment to check for understanding. Timed Multiplication Quizzes, 180 Days of Math Activities, Drill sheets, and Interactive Notebook pages can be found in the Third Grade Supplemental Activities binder.

Differentiating Instruction:
Students with Disabilities, English Language Learners,
and Gifted & Talented Students

Examples of Strategies and Practices that Support Students with Disabilities:
• Use of visual and multisensory formats
• Use of assisted technology
• Use of prompts
• Modification of content and student products
• Testing accommodations
• Authentic assessments

Examples of Strategies and Practices that Support Gifted & Talented Students:
• Adjusting the pace of lessons
• Curriculum compacting
• Inquiry-based instruction
• Independent study
• Higher-order thinking skills
• Interest-based content
• Student-driven instruction
• Real-world problems and scenarios

Examples of Strategies and Practices that Support English Language Learners:
• Pre-teaching of vocabulary and concepts
• Visual learning, including graphic organizers

• Use of cognates to increase comprehension
• Teacher modeling
• Pairing students with beginning English language skills with students who have more advanced English language skills
• Scaffolding
•Word walls
•Sentence frames
•Think-pair-share
•Cooperative learning groups

Mathematics- Grade 3 Unit 6

Unit Title: Measurement	

Unit Summary: All students will solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Primary Interdisciplinary Connections: Language Arts, Technology -8.1 Educational Technology, NJSLSA.R7,

21st Century Career and Life Themes: CRP8, CRP 11

Learning Targets

NJSLS Standards: 3.MD.1-2&4-8; 3.NBT.2; 3.OA.3,5,7-9

Technology Standards: 8.1 Educational Technology

Content Statements:

1	Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects
2	Geometric measurement: understand concepts of area and relate area to multiplication and to addition
3	Use place value understanding and properties of operations to perform multi-digit arithmetic
4	Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures

Big Idea: Different strategies can help us determine appropriate units of measurement for real-life scenarios.

Unit Essential Questions:	**Unit Enduring Understandings:**
• What strategies can you use to generate data?	• Different strategies involving measuring data can help generate the data into appropriate tables, diagrams, or pictures.

Unit Learning Targets
Students will...

- 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.
- 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.
- Generate measurement data by measuring lengths 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.

- Recognize area as an attribute of plane figures and understand concepts of area measurement.
- 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.
- 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.
- Measure areas by counting unit squares (square cm, square m, square in, square ft, and non-standard units).
- Relate area to the operations of multiplication and addition.
- 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.
- 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.
- 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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning.
- 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.
- 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.

Evidence of Learning

Summative Assessment: Chapters 10-11 tests; Mid-Chapter Checkpoints

Formative Assessments:

- "Show What You Know"-pgs. 387, 388, 431, 432
- Exit slips
- Quizzes
- Notebook check
- Teacher observation
- Class Participation
- Problem of the day

Lesson Plans

Activities	Timeframe
• Project: *Plan a Playground*-pg. 386 • *Time After Time*-activity card 8 (blue)	Weeks 26-31

- *Late for School*-literature
- *Matching Time*-game card
- *Inch by Inch*-activity card 6 (orange)
- *A Trip to the Pond*-literature

 Ongoing activities:
- Timed Multiplication Quizzes
- 180 Days of Math Activities
- Interactive Notebook

The following Mathematical Practices are to be included in math activities:
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Teacher Resources	*Teacher Note*
- Textbook - Textbook resource materials - Grab-and-Go Differentiated Centers Kit - Student Math Boards - Clocks - Rulers - Number line - Measuring cup - Triple beam balance - Vocabulary for each chapter - Supplemental Teacher Binder - Personal Math Trainer	Activities can always be used during small group instruction for the use of a math center or during whole group instruction as a mini-assessment to check for understanding. Timed Multiplication Quizzes, 180 Days of Math Activities, Drill sheets, and Interactive Notebook pages can be found in the Third Grade Supplemental Activities binder.

Differentiating Instruction:
Students with Disabilities, English Language Learners,
and Gifted & Talented Students

Examples of Strategies and Practices that Support Students with Disabilities:
• Use of visual and multisensory formats

- Use of assisted technology
- Use of prompts
- Modification of content and student products
- Testing accommodations
- Authentic assessments

Examples of Strategies and Practices that Support Gifted & Talented Students:
- Adjusting the pace of lessons
- Curriculum compacting
- Inquiry-based instruction
- Independent study
- Higher-order thinking skills
- Interest-based content
- Student-driven instruction
- Real-world problems and scenarios

Examples of Strategies and Practices that Support English Language Learners:
- Pre-teaching of vocabulary and concepts
- Visual learning, including graphic organizers
- Use of cognates to increase comprehension
- Teacher modeling
- Pairing students with beginning English language skills with students who have more advanced English language skills
- Scaffolding
- Word walls
- Sentence frames
- Think-pair-share
- Cooperative learning groups

Unit Title: Geometry
Unit Summary: All students will describe and analyze two-dimensional shapes and their attributes.
Primary Interdisciplinary Connections: Language Arts, Technology -8.1 Educational Technology, NJSLSA.R7
21st Century Career and Life Themes: CRP8, CRP 11

Learning Targets
NJSLS Standards: 3.G.1-2; 3.NF.1,3
Technology Standards: 8.1 Educational Technology
Content Statements:

1	Reason with shapes and their attributes.
2	Develop understanding of fractions as numbers.

Big Idea: Different strategies can help us identify and measure two-dimensional shapes.

Unit Essential Questions:	Unit Enduring Understandings:
• How can you use geometric shapes to solve real-world problems?	• Classifying geometric shapes can help use select strategies to help us solve real-world problems.

Unit Learning Targets
Students will…

• 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.

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

• Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.

• Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.

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

• Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the

fractions are equivalent, e.g., by using a visual fraction model.

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

Evidence of Learning

Summative Assessment: Chapter 12 Test; Mid-Chapter Checkpoint

Formative Assessments:

- "Show What You Know"-pgs. 481, 482
- Exit slips
- Quizzes
- Teacher observation
- Class Participation
- Problem of the day
- On Your Own Problems

Lesson Plans

Activities	Timeframe
• *Classification Act*-activity card 18 (orange) • *Figure it Out*- activity card 18 (blue) • *What Figure?*-activity card 18 (purple) Ongoing activities: • Timed Multiplication Quizzes • 180 Days of Math Activities • Interactive Notebook The following Mathematical Practices are to be included in math activities: 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure.	Weeks 32-34

8. Look for and express regularity in repeated reasoning.	
Teacher Resources	*Teacher Note*
• Textbook • Textbook resource materials • Student Math Boards • Clocks • Rulers • Number line • Measuring cup • Triple beam balance • Vocabulary for each chapter • Supplemental Teacher Binder • Personal Math Trainer	Activities can always be used during small group instruction for the use of a math center or during whole group instruction as a mini-assessment to check for understanding. Timed Multiplication Quizzes, 180 Days of Math Activities, Drill sheets, and Interactive Notebook pages can be found in the Third Grade Supplemental Activities binder.

Differentiating Instruction:
Students with Disabilities, English Language Learners,
and Gifted & Talented Students

Examples of Strategies and Practices that Support Students with Disabilities:
• Use of visual and multisensory formats
• Use of assisted technology
• Use of prompts
• Modification of content and student products
• Testing accommodations
• Authentic assessments

Examples of Strategies and Practices that Support Gifted & Talented Students:
• Adjusting the pace of lessons
• Curriculum compacting
• Inquiry-based instruction
• Independent study
• Higher-order thinking skills
• Interest-based content
• Student-driven instruction
• Real-world problems and scenarios

Examples of Strategies and Practices that Support English Language Learners:
• Pre-teaching of vocabulary and concepts
• Visual learning, including graphic organizers
• Use of cognates to increase comprehension
• Teacher modeling
• Pairing students with beginning English language skills with students who have more advanced

English language skills
• Scaffolding
•Word walls
•Sentence frames
•Think-pair-share
•Cooperative learning groups

Unit Title: Bridging the Gap

Unit Summary: In this unit, students will build on Grade 3 skills to prepare for Grade 4 content.

Primary Interdisciplinary Connections: Language Arts, Technology -8.1 Educational Technology, NJSLSA.R7

21st Century Career and Life Themes: CRP8, CRP 11

Learning Targets

NJSLS Standards: 3.NBT.3; 3.NF.1,3; 3.G.1; 3.MD.2, ; 4.NBT.1-2&5-6; 4.NF.1,3,6; 4.G.3; 4.MD.1

Technology Standards: 8.1 Educational Technology

Content Statements:

1	Represent and solve problems involving multiplication and division
2	Understand properties of multiplication and the relationship between multiplication and division
3	Multiply and divide within 100
4	Solve problems involving the four operations, and identify and explain patterns in arithmetic
5	Use place value understanding and properties of operations to perform multi-digit arithmetic
6	Develop understanding of fractions as numbers

Big Idea: To continue growing and improving skills for next year's content.

Unit Essential Questions:	**Unit Enduring Understandings:**
• How can you further your knowledge of current skills to prepare for higher level content in the 4th grade?	• Using different strategies can build current skills and advance students' knowledge to prepare for next year.

Unit Learning Targets
Students will…

- Fluently 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 the end of Grade 3, know from memory all products of two one-digit numbers.

- 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.

- Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.

- Explain equivalence of fractions in special cases, and compare fractions by reasoning about

their size.

- Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.
- Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent, e.g., by using a visual fraction model.
- Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.
- Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.
- 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.
- 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.
- Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.
- Understand a fraction a/b with a > 1 as a sum of fractions 1/b.
- Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
- Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model.
- Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.
- Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.
- Use decimal notation for fractions with denominators 10 or 100.
- Know relative sizes of measurement units within one system of units including km, m, cm. mm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two column table.
- Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and

draw lines of symmetry.

- Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.
- Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons
- Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Evidence of Learning

Summative Assessment: Getting Ready for Grade 4 Tests 1 & 2

Formative Assessments:

- Exit slips
- Quizzes
- Notebook check
- Teacher observation
- Class Participation
- Problem of the day

Lesson Plans

Activities	Timeframe
• Project: *Horses in the Movies (pg. B9)* • Project: *The Skateboard Designer (pg. B13)* • Project: *Zoo Animal Habitats (pg. B17)* • Project: *Gems and Jewelry (pg. B21)* Ongoing activities: • Timed Multiplication Quizzes • 180 Days of Math Activities • Interactive Notebook The following Mathematical Practices are to be included in math activities:	Weeks 35-38

1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	
Teacher Resources	*Teacher Note*
• Textbook • Textbook resource materials • Student Math Boards • Vocabulary for each chapter • Personal Math Trainer • Supplemental Teacher Binder	The student targets or objectives are for the topics that need to be addressed. Please use these as guidelines for creating activities. Timed Multiplication Quizzes, 180 Days of Math Activities, Drill sheets, and Interactive Notebook pages can be found in the Third Grade Supplemental Activities binder.

Differentiating Instruction:
Students with Disabilities, English Language Learners,
and Gifted & Talented Students

Examples of Strategies and Practices that Support Students with Disabilities:
• Use of visual and multisensory formats
• Use of assisted technology
• Use of prompts
• Modification of content and student products
• Testing accommodations
• Authentic assessments

Examples of Strategies and Practices that Support Gifted & Talented Students:
• Adjusting the pace of lessons
• Curriculum compacting
• Inquiry-based instruction
• Independent study
• Higher-order thinking skills
• Interest-based content
• Student-driven instruction
• Real-world problems and scenarios

Examples of Strategies and Practices that Support English Language Learners:
• Pre-teaching of vocabulary and concepts
• Visual learning, including graphic organizers
• Use of cognates to increase comprehension
• Teacher modeling
• Pairing students with beginning English language skills with students who have more advanced English language skills
• Scaffolding
•Word walls
•Sentence frames
•Think-pair-share
•Cooperative learning groups