



THIRD GRADE MATHEMATICS CURRICULUM

Rochelle Park Mission Statement

We envision an educational community, which inspires and empowers all students to become self-sufficient and to thrive in a complex, global society.

Rochelle Park Vision Statement

- ❖ Establish and maintain a shared responsibility among home, school, and the greater community which fosters student learning, accountability, and citizenship.
- ❖ To provide curricula that enables all students to meet or exceed current national, state, and local standards.
- ❖ We will utilize a variety of formative and summative assessments in order to differentiate and guide instruction.
- ❖ The district, as a Professional Learning Community, will provide on-going professional development training and opportunities for collaboration among faculty and staff.



PACING CHART

Chapter	Time Frame
Ch. 1: Addition and Subtraction Within 1,000	15 days
Ch. 2: Represent and Interpret Data	10 days
Ch. 3: Understand Multiplication	10 days
Ch. 4: Multiplication Facts and Strategies	13 days
Ch. 5: Use Multiplication Facts	8 days
Ch. 6: Understand Division	13 days
Ch. 7: Division Facts and Strategies	14 days
Ch. 8: Understand Fractions	14 days
Ch. 9: Compare Fractions	12 days
Ch. 10: Time, Length, Liquid, Volume, and Mass	10 days
Ch. 11: Perimeter and Area	15 days
Ch. 12: Two-Dimensional Shapes	12 days



Mathematic Domains

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Understand and apply properties of operations and the relationship between addition and subtraction.
- Add and subtract within 20.
- Work with addition and subtraction equations.

Number and Operations in Base Ten

- Extend the counting sequence.
- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

Measurement and Data

- Measure lengths indirectly and by iterating length units.
- Tell and write time.
- Represent and interpret data.

Geometry

- Reason with shapes and their attributes.

Mathematical Practices

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.



8.1 Educational Technology

All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

8.2 Technology Education, Engineering, Design, and Computational Thinking-Programming

All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.

Educational Technology

Indicators: 8.1.5.A.1, 8.1.5.A.4, 8.1.5.D.3, 8.2.5.C.4, 8.2.5.E.4

- Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.
- Graph data using a spreadsheet, analyze and produce a report that explains the analysis of data.
- Demonstrate an understanding of the need to practice cyber safety, cyber security, and cyber ethics when using technologies and social media.
- Collect and brainstorm with peers to solve a problem evaluating all solutions to provide the best results with supporting sketches or models.
- Use appropriate terms in conversation (e.g. algorithm, program, debug, loop, events, procedures, memory, storage, processing, software, coding, procedure, and data).



21st Century Life and Careers Skills

Indicators: 9.1.4.C.4, 9.1.4.D.1, 9.2.4.A.4

- Determine the relationship among income expenses and interests.
- Determine various ways to save.
- Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Career Ready Practices

Indicators: CRP1, CRP2, CRP4, CRP6, CRP7, CRP8, CRP9, CRP11, CRP12

- Act as responsible and contributing citizen and employee.
- Apply appropriate academic and technical skills.
- Communicate clearly and effectively and with reason.
- Demonstrate creativity and innovation.
- Employ valid and reliable research strategies.
- Utilize critical thinking to make sense of problems and persevere in solving them.
- Model integrity, ethical leadership and effective management.
- Use technology to enhance productivity.
- Work productively in teams while using cultural global competence.

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Grade: Third		Content: Mathematics	
Domain: Operations and Algebraic Thinking		Topic: Addition and Subtraction within 1000	Time Frame: 15 days
Standards: 3.OA.D.8 3.OA.D.9 3.NBT.A.1 3.NBT.A.2		Focus Mathematical Practices: MP2: Reason abstractly and quantitatively. MP7: Look for and make use of structure. MP8: Look for and express regularity in repeated reasoning.	PARCC Model Content Framework: Major Content: 3.OA.8, 3.OA.9 Supporting Content: n/a Additional Content: 3.NBT.1, 3.NBT.2

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> ● How can you add and subtract whole numbers and decide if an answer is reasonable? ● How can you use properties to explain patterns on the addition table? ● How can you round numbers? ● How can you use compatible numbers and rounding to estimate sums and differences? ● What mental math strategies can you use to find sums and differences? ● How can you add more than two addends? ● How can you use the break-apart strategy to add 3-digit numbers? ● How can you use place value to add and subtract 3-digit numbers? ● How can you use the combine place values strategies to subtract 3-digit numbers? ● How can you use the strategy draw a diagram to solve one- and two-step addition and subtraction problems. 	<ul style="list-style-type: none"> ● Develop procedural fluency with multi-digit subtraction/addition. ● Solve problems involving four operations and identify and explain patterns in arithmetic. Use place value understanding and properties of operation to perform multi-digit arithmetic.

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Skills	NJDOE Model Curriculum (Student Learning Objectives)
<p>Students will be able to:</p> <ul style="list-style-type: none"> ● Identify and describe whole-number patterns and solve problems. ● Round 2- and 3-digit numbers to the nearest ten. ● Use compatible numbers and rounding to estimate sums and differences. ● Count by tens and ones, use a number line, make compatible numbers, or use friendly numbers to find sums mentally. ● Use the Commutative and Associative Properties of Addition to add more than two addends. ● Use the break-apart strategy to add 3-digit numbers. ● Use place value to add and subtract 3-digit numbers. ● Use a number line, friendly numbers, or the break-apart strategy to find differences mentally. ● Use the combine place values strategy to subtract 3-digit numbers. ● Solve addition and subtraction problems by using the strategy draw a diagram. 	<p>Students will know how to:</p> <ul style="list-style-type: none"> ● Round whole numbers to the nearest 10 or 100. ● Fluently add and subtract (with regrouping) two-digit whole numbers within 100. ● Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operation, and/or the relationship between addition and subtraction.

Vocabulary	Resources	Assessment/Project
<p>Associative Property of Addition Commutative Property of Addition compatible numbers estimate Identity Property of Addition pattern round</p>	<ul style="list-style-type: none"> ● GOMath Lessons 1.1-1.12 ● GOMath iTools and eGlossary (Think Central) ● GOMath! Animated Math Models ● Corresponding Go Math! Grab and Go for Activities/Literature/Games ● HMH Mega Math ● Corresponding GOMath! Daily Routines ● https://www-k6.thinkcentral.com/ePC/start.do ● http://www.corestandards.org/Math ● http://www.xtramath.org 	<ul style="list-style-type: none"> ● Ongoing teacher observations (ie exit cards, think, pair share, or numbered heads together) ● Workbook pages ● Center Work and activities ● Mixed Practice and Cumulative Review ● Math Journals ● Do Now's ● Topic/Unit 1 Test

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Differentiated Instruction		Interdisciplinary Connections
RTI/ELL	Enrichment	
<ul style="list-style-type: none"> ● Number line ● Grab and GO Kits ● Anchor charts, word wall ● Manipulatives ● Multiple Response ● Reteach Book ● Rtl Quick Check 	<ul style="list-style-type: none"> ● Math Journals, DO NOWs ● White boards ● Chromebook ● Accountable Talk, Critical Thinking ● Enrichment Book 	<p>Literature Connection- <u>So Many Seashells</u>: Students read about how to use addition to find the number of seashells collected.</p> <p>Literature Connection-<u>More Acorns</u>: Students use subtraction and estimation to determine how many acorns Sanford Squirrel needs for the winter.</p> <p>Science Connection- Stars and Planets. Students calculate the distance between Earth and different stars and planets. Students calculated the difference in the length of a year on Earth versus other planets.</p>

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Grade: Third		Content: Mathematics
Domain: Measurement and Data	Topic: Represent and Interpret Data	Time Frame: 10 days
Standards: 3.MD.B.3 3.MD.B.4 3.OA.D.8 3.NBT.A.2	Focus Mathematical Practices: MP1: Make sense of problems and persevere in solving them. MP4: Model with mathematics. MP6: Attend to precision	PARCC Model Content Framework: Major Content: 3.OA.8 Supporting Content: 3.MD.3, 3.MD.4 Additional Content: 3.NBT.2

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> • How can you represent and interpret data? • How can you use the strategy make a table to organize data and solve problems? • How can you read and interpret data in a picture graph or a bar graph? • How can you draw a picture graph or a bar graph to show data in a table? • How can you solve problems using data represented in a bar graph? • How can you read and interpret data in a line plot and use data to make a line plot? 	<ul style="list-style-type: none"> • Represent and interpret data in picture graphs, bar graphs, and line plots. • Apply mathematics knowledge to create graphs and analyze data to make sense of relationships and draw conclusions.

Skills	NJDOE Model Curriculum (Student Learning Objectives)
<p>Students will be able to:</p> <ul style="list-style-type: none"> • Organize data in tables and solve problems using the strategy make a table. • Read interpret data in a scaled picture graph or a scaled bar graph. • Draw a scaled picture graph or a scaled bar graph to show data in a table? • Solve one- and two-step compare problems using data represented in scaled bar graphs. • Read and interpret data in a line plot and use data to make a line plot. 	<p>Students will know how to:</p> <ul style="list-style-type: none"> • Create and interpret a scaled picture (or bar) graph to represent data in one- or two-step word problems. • Depict data measured in fourths and halves of an inch with a line plot with scales marked with appropriate units.

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Vocabulary	Resources	Assessment/Project
<p>bar graph frequency table horizontal bar graph key line plot picture graph scale vertical bar graph</p>	<ul style="list-style-type: none"> ● GOMath Lessons 2.1-2.7 ● GOMath iTools and eGlossary (Think Central) ● GOMath! Animated Math Models ● Corresponding Go Math! Grab and Go for Activities/Literature/Games ● HMH Mega Math ● Corresponding GOMath! Daily Routines ● https://www-k6.thinkcentral.com/ePC/start.do ● http://www.corestandards.org/Math ● http://www.xtramath.org 	<ul style="list-style-type: none"> ● Ongoing teacher observations (ie exit cards, think, pair share, or numbered heads together) ● Workbook pages ● Center Work and activities ● Mixed Practice and Cumulative Review ● Math Journals ● Do Now's ● Topic/Unit 2 Test
Differentiated Instruction		Interdisciplinary Connections
RTI/ELL	Enrichment	<p>Literature Connection-<u>Diego's Perfect Fit</u>. Students read about collecting, organizing, and representing data in a table and in a picture graph.</p> <p>Social Studies Connection- Research national parks/landmarks. Have students choose which national park they would like to visit. Have them make a tally table to show their answers. Then have students find how many fewer students chose one park than another using the strategy of making a frequency table.</p> <p>Science Connection- Review common gemstones and their characteristics. Ask students to name their favorite gemstone and create a picture graph to display the data.</p>
<ul style="list-style-type: none"> ● Number line ● Grab and GO Kits ● Anchor charts, word wall ● Manipulatives ● Multiple Response ● Reteach Book 	<ul style="list-style-type: none"> ● Math Journals, DO NOWs ● White boards ● Chromebook ● Accountable Talk, Critical Thinking ● Enrichment Book 	

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Grade: Third		Content: Mathematics	
Domain: Operations and Algebraic Thinking		Topic: Understanding Multiplication	Time Frame: 10 days
Standards: 3.OA.A.1 3.OA.C.7 3.OA.A.3 3.OA.D.8 3.OA.B.5 3.NBT.A.2		Focus Mathematical Practices: MP1: Make sense of problems and persevere in solving them. MP7: Look for and make use of structure.	PARCC Model Content Framework: Major Content: 3.OA.1, 3.OA.3, 3.OA.5, 3.OA.8, 3.OA.7 Supporting Content: n/a Additional Content: 3.NBT.2

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> • How can you use multiplication to find how many in all? • How can you use equal groups to find how many in all? • How is multiplication like addition? How is it different? • How can you use a number line to skip count and find how many in all? • How can you use the strategy draw a diagram to solve one- and two-step problems? • How can you use arrays to model multiplication and find factors? • How can you use the Commutative Property of Multiplication to find products? • What happens when you multiply a number by 0 or 1? 	<ul style="list-style-type: none"> • Model multiplication problems with pictures, diagrams, or concrete materials. • Solve multiplication problems presented in context. • Use properties of multiplication patterns to multiply within 100. • Reach fluency with finding products of single-digit numbers.

Skills	NJDOE Model Curriculum (Student Learning Objectives)
<p>Students will be able to:</p> <ul style="list-style-type: none"> • Model and skip count objects in equal groups to find how many there are. • Write an addition sentence and a multiplication sentence for a model. • Model and skip count on a number line to find how many there are. • Solve one- and two-step problems by using the strategy draw a diagram. • Use arrays to model products and factors. • Model the Commutative Property of Multiplication and use it to find products. • Model multiplication with the factors 1 and 0. 	<p>Students will know how to:</p> <ul style="list-style-type: none"> • Interpret products of whole numbers as repeated addition or equal groups of objects (up to 100). • Recognize the Commutative, Associative, and Distributive Properties as strategies to multiply whole numbers. • Use multiplication within 100 to solve word problems using measurement quantities by creating drawings or arrays. • Use multiplication within 100 to solve word problems modeled as equal groups or arrays by writing equations to represent equal groups or arrays. • Fluently multiply and divide within 50, using the relationship between multiplication and division.

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Vocabulary	Resources	Assessment/Project
array Commutative Property of Multiplication equal groups factor Identity Property of Multiplication multiply product Zero Property of Multiplication	<ul style="list-style-type: none"> ● GOMath Lessons 3.1-3.7 ● GOMath iTools and eGlossary (Think Central) ● GOMath! Animated Math Models ● Corresponding Go Math! Grab and Go for Activities/Literature/Games ● HMH Mega Math ● Corresponding GOMath! Daily Routines ● https://www-k6.thinkcentral.com/ePC/start.do ● http://www.corestandards.org/Math ● http://www.xtramath.org 	<ul style="list-style-type: none"> ● Ongoing teacher observations (ie exit cards, think, pair share, or numbered heads together) ● Workbook pages ● Center Work and activities ● Mixed Practice and Cumulative Review ● Math Journals ● Do Now's ● Topic/Unit 3 Test
Differentiated Instruction		Interdisciplinary Connections
RTI/ELL	Enrichment	<p>Literature Connection- <u>The Workshop</u>: Students read about how Amanda uses multiplication to find the number of wooden stool legs she needs to carve.</p> <p>Literature Connection-<u>Collections Times Four</u>: Students read the book and determine how to use multiplication to find the total number of objects in each collection.</p>
<ul style="list-style-type: none"> ● Number line ● Grab and GO Kits ● Anchor charts, word wall ● Manipulatives ● Multiple Response ● Reteach Book 	<ul style="list-style-type: none"> ● Math Journals, DO NOWs ● White boards ● Chromebook ● Accountable Talk, Critical Thinking ● Enrichment Book 	

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Grade: Third		Content: Mathematics	
Domain: Operations and Algebraic Thinking		Topic: Multiplication Facts and Strategies	Time Frame: 13 days
Standards: 3.OA.A.1 3.OA.C.7 3.OA.A.3 3.OA.D.8 3.OA.A.4 3.OA.D.9 3.OA.B.5		Focus Mathematical Practice: MP1: Make sense of problems and persevere in solving them. MP4: Model with mathematics. MP7: Look for and make use of structure.	PARCC Model Content Framework: Major Content: 3.OA.1, 3.OA.3, 3.OA.4, 3.OA.5, 3.OA.7, 3.OA.8, 3.OA.9 Supporting Content: n/a Additional Content: n/a

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> ● What strategies can you use to multiply? ● How can you multiply with 2 and 4? ● How can you multiply with 5 and 10? ● What are some ways to multiply with 3 and 6? ● How can you use the Distributive Property to find products? ● What strategies can you use to multiply with 7? ● How can you use the Associative Property of Multiplication to find products? ● How can you use properties to explain patterns on the multiplication table? ● What strategies can you use to multiply with 8? ● What strategies can you use to multiply with 9? ● How can you use the strategy make a table to solve multiplication problems? 	<ul style="list-style-type: none"> ● Derive unknown facts from known facts. ● Identify patterns in a multiplication table. ● Apply multiplication strategies such as if one of the factors in a multiplication problem is doubled, the product is doubled. ● Use the Associative and Distributive properties to multiply within 100. ● Reach fluency with finding products of single-digit numbers.

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Skills	NJDOE Model Curriculum (Student Learning Objectives)
<p>Students will be able to:</p> <ul style="list-style-type: none"> ● Use various strategies such as; draw a picture, skip count, doubles, number line, bar model, multiplication table, and arrays to multiply factors. ● Use Distributive, Associative, and Commutative Properties to multiply factors. ● Identify and explain patterns in the multiplication table. ● Solve multiplication problems by using the strategy “make a table”. 	<p>Students will know how to:</p> <ul style="list-style-type: none"> ● Fluently multiply and divide within 100, using the relationship between multiplication and division. ● Recognize the Commutative, Associative, and Distributive Properties as strategies to add and multiply whole numbers. ● Use multiplication within 100 to solve word problems using measurement quantities by creating drawings or arrays. ● Use multiplication within 100 to solve word problems modeled as equal groups or arrays by writing equations to represent equal groups or arrays. ● Recognize arithmetic patterns in multiplication tables and explain the patterns using the properties of operations. ● Interpret products of whole numbers as repeated addition or equal groups of objects (up to 100).

Vocabulary	Resources	Assessment/Project
<p>Associative Property of Multiplication Distributive Property multiple</p>	<ul style="list-style-type: none"> ● GOMath Lessons 4.1- 4.10 ● GOMath iTools and eGlossary (Think Central) ● GOMath! Animated Math Models ● Corresponding Go Math! Grab and Go for Activities/Literature/Games ● HMH Mega Math ● Corresponding GOMath! Daily Routines ● https://www-k6.thinkcentral.com/ePC/start.do ● http://www.corestandards.org/Math ● http://www.xtramath.org 	<ul style="list-style-type: none"> ● Ongoing teacher observations (ie exit cards, think, pair share, or numbered heads together) ● Workbook pages ● Center Work and activities ● Mixed Practice and Cumulative Review ● Math Journals ● Do Now's ● Topic/Unit 4 Test

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Differentiated Instruction		Interdisciplinary Connections
RTI/ELL	Enrichment	
<ul style="list-style-type: none">● Number line● Grab and GO Kits● Anchor charts, word wall● Manipulatives● Multiple Response● Reteach Book	<ul style="list-style-type: none">● Math Journals, DO NOWs● White boards● Chromebook● Accountable Talk, Critical Thinking● Enrichment Book	<p>Science Connection- Have students research insects to determine mass they can carry. Write and solve word problems to determine how much insects can carry based on their mass.</p> <p>Social Studies Connection- Have students research the telegraph and Morse code. Write and solve Morse code math problems.</p>

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Grade: Third		Content: Mathematics	
Domain: Operations and Algebraic Thinking, Number and Operations in Base Ten		Topic: Use Multiplication Facts	Time Frame: 8 days
Standards: 3.OA.A.1 3.OA.A.3 3.OA.A.4 3.OA.B.5 3.OA.C.7 3.OA.D.9 3.NBT.A.3		Focus Mathematical Practices: MP4: Model with mathematics. MP5: Use appropriate tools strategically.	PARCC Model Content Frameworks: Major Content: 3.OA.1, 3.OA.3, 3.OA.4, 3.OA.5, 3.OA.7, 3.OA.9 Supporting Content: n/a Additional Content: 3.NBT.3

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> ● How can you use multiplication facts, place value, and properties to solve multiplication problems? ● What are some ways you can describe a pattern using a table? ● How can you use an array or multiplication table to find an unknown factor? ● How can you use a strategy “draw a diagram” to multiply with multiples of ten? ● What strategies can you use to multiply with multiples of ten? ● How can you model and record multiplying multiples of ten with one-digit whole numbers? 	<ul style="list-style-type: none"> ● Place value is a foundational principle and used in multiplication. ● Use the Distributive Property to break apart a factor in a meaningful way to carry out the multiplication. ● Reach fluency with finding products of single-digit numbers.

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Skills	NJDOE Model Curriculum (Student Learning Objectives)
<p>Students will be able to:</p> <ul style="list-style-type: none"> ● Identify and describe a number pattern shown in a function table. ● Use an array or a multiplication table to find an unknown factor. ● Solve multiplication problems by using the strategy “draw a diagram”. ● Use base ten blocks, a number line, or place value to multiply with multiples of ten. ● Model and record multiplication with multiples of ten. 	<p>Students will know how to:</p> <ul style="list-style-type: none"> ● Determine the unknown in a multiplication equation with an unknown relating 3 whole numbers to 100 (does not require students to solve from memory). ● Recognize arithmetic patterns in addition or multiplication tables and explain the pattern using the properties of operation. ● Multiply one-digit whole numbers by multiples of 10 (10-90). ● Interpret products of whole numbers as repeated addition or equal groups of objects (up to 100). ● Recognize the Commutative, Associative, and Distributive Properties as strategies to add and multiply whole numbers. ● Use multiplication within 100 to solve word problems using measurement quantities by creating drawings or arrays. ● Use multiplication within 100 to solve word problems modeled as equal groups or arrays by writing equations to represent equal groups or arrays.

Vocabulary	Resources	Assessment/Project
<p>equation</p>	<ul style="list-style-type: none"> ● GOMath Lessons 5.1- 5.5 ● GOMath iTools and eGlossary (Think Central) ● GOMath! Animated Math Models ● Corresponding Go Math! Grab and Go for Activities/Literature/Games ● HMH Mega Math ● Corresponding GOMath! Daily Routines ● https://www-k6.thinkcentral.com/ePC/start.do ● http://www.corestandards.org/Math ● http://www.xtramath.org 	<ul style="list-style-type: none"> ● Ongoing teacher observations (ie exit cards, think, pair share, or numbered heads together) ● Workbook pages ● Center Work and activities ● Mixed Practice and Cumulative Review ● Math Journals ● Do Now's ● Topic/Unit 5 Test

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Differentiated Instruction		Interdisciplinary Connections
RTI/ELL	Enrichment	
<ul style="list-style-type: none"> ● Number line ● Grab and GO Kits ● Anchor charts, word wall ● Manipulatives ● Multiple Response ● Reteach Book 	<ul style="list-style-type: none"> ● Math Journals, DO NOWs ● White boards ● Chromebook ● Accountable Talk, Critical Thinking ● Enrichment Book 	<p>Literature Connection- <u>Party Plans by the Numbers</u>. Students read the books and use multiplication facts and strategies to plan a party.</p> <p>Writing Connection- Work with a partner to explain and illustrate two ways to multiply with multiples of 10. Write a paragraph that uses at least three of these words (equation, factors, pattern, place value, product).</p>

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Grade: Third		Content: Mathematics	
Domain: Operations and Algebraic Thinking		Topic: Understand Division	
Standards: 3.OA.A.2 3.OA.B.5 3.OA.A.3 3.OA.B.6 3.OA.A.4 3.OA.C.7		Focus Mathematical Practices: MP2: Reason abstractly and quantitatively. MP5: Use appropriate tools strategically. MP8: Look for and express regularity in repeated reasoning.	
		Time Frame: 13 days	
		PARCC Model Content Framework: Major Content: 3.OA.2, 3.OA.3, 3.OA.4, 3.OA.5, 3.OA.6, 3.OA.7 Supporting Content: n/a Additional Content: n/a	

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> How can you use division to find how many in each group or how many in equal groups? How can you use the strategy <i>act it out</i> to solve problems with equal groups? How can you model a division problem to find out how many in each group or how many equal groups? How can you use bar models or arrays to solve division problems? How is division related to subtraction? How can you use multiplication to divide? How can you write a set of multiplication and division facts? What are the rules for dividing with one and zero? 	<ul style="list-style-type: none"> Division is represented by problem contexts where the total is known and either the number of groups or the number of objects in each group is unknown. Identify when a problem situation requires division. Reach fluency with finding products of single-digit numbers and their related quotients.

Skills	NJDOE Model Curriculum(Student Learning Objectives)
<p>Students will be able to:</p> <ul style="list-style-type: none"> Solve division problems by using the strategy <i>act it out</i>. Use models to explore the meaning of partitive and quotative division. Model division by using equal groups, bar models, and arrays. Use repeated subtraction and a number line to relate subtraction to division. Use bar models and arrays to relate multiplication and division as inverse operations. Write related multiplication and division facts. Divide using the rule for 1 and 0. 	<p>Students will know how to:</p> <ul style="list-style-type: none"> Solve division of whole numbers by representing the problem as an unknown factor problem. Divide within 40 using strategies such as the relationship between multiplication and division. Explain division as a set of objects partitioned equally into a number of shares (up to 100). Determine the unknown in a division equation with an unknown relating 3 whole numbers up to 100 (does not require students to solve from memory).

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Vocabulary	Resources	Assessment/Project
divide dividend divisor inverse operations quotient related facts	<ul style="list-style-type: none"> ● GOMath Lessons 6.1- 6.9 ● GOMath iTools and eGlossary (Think Central) ● GOMath! Animated Math Models ● Corresponding Go Math! Grab and Go for Activities/Literature/Games ● HMH Mega Math ● Corresponding GOMath! Daily Routines ● https://www-k6.thinkcentral.com/ePC/start.do ● http://www.corestandards.org/Math ● http://www.xtramath.org 	<ul style="list-style-type: none"> ● Ongoing teacher observations (ie exit cards, think, pair share, or numbered heads together) ● Workbook pages ● Center Work and activities ● Mixed Practice and Cumulative Review ● Math Journals ● Do Now's ● Topic/Unit 6 Test
Differentiated Instruction		Interdisciplinary Connections
RTI/ELL	Enrichment	<p>Literature Connection-Sports Camp: Students read about how division is used to make groups at a sports camp.</p> <p>Science Connection- Discuss the parts of a plant. Students will draw pictures of plants and label the four parts described. Then students will write division problems based on plants.</p>
<ul style="list-style-type: none"> ● Number line ● Grab and GO Kits ● Anchor charts, word wall ● Manipulatives ● Multiple Response ● Reteach Book 	<ul style="list-style-type: none"> ● Math Journals, DO NOWs ● White boards ● Chromebook ● Accountable Talk, Critical Thinking ● Enrichment Book 	

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Grade: Third		Content: Mathematics	
Domain: Operations and Algebraic Thinking		Topic: Division Facts and Strategies	
Standards: 3.OA.A.1 3.OA.B.5 3.OA.A.2 3.OA.B.6 3.OA.A.3 3.OA.C.7 3.OA.A.4 3.OA.D.8		Focus Mathematical Practices: MP2: Reason abstractly and quantitatively. MP3: construct viable arguments and critique the reasoning of others. MP6: Attend to precision.	
		Time Frame: 14 days	
		PARCC Model Content Framework: Major Content: 3.OA.1, 3.OA.2, 3.OA.3, 3.OA.4, 3.OA.5, 3.OA.6, 3.OA.7, 3.OA.8 Supporting Content: n/a Additional Content: n/a	

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> • What strategies do you use to divide? • What does dividing by 2 mean? • What strategies can you use to divide by 2, 3, 4, 5, 6, 7, 8, 9, 10? • How can you use the strategy act it out to solve two-step problems? • Why are there rules such as the order of operations? 	<ul style="list-style-type: none"> • Connect division and multiplication to develop proficiency with division facts. • Use properties of multiplication and division to divide within 100. • Reach fluency with finding products of single-digit numbers and their related quotients.

Skills	NJDOE Model Curriculum (Student Learning Objectives)
<p>Students will be able to:</p> <ul style="list-style-type: none"> • Use models to represent division by 2. • Use repeated subtraction, a number line, or a multiplication table to divide by 10. • Count up by 5's, count back on a number line, or use 10s facts and doubles to divide by 5. • Use equal groups, a number line, or a related multiplication fact to divide by 3. • Use an array, equal groups, factors, or a related multiplication fact to divide by 4. • Use equal groups, a related multiplication fact, or factors to divide by 6, 7, 8, 9 • Solve two-step problems by using the strategy act it out. • Perform operations in order when there are no parentheses. 	<p>Students will know how to:</p> <ul style="list-style-type: none"> • Explain division as a set of objects partitioned equally into a number of shares (up to 100). • Fluently divide within 100, using the relationship between multiplication and division. • Find the value of an unknown (expressed as a letter) in an equation that is a representation of a two-step word problem (with any four operations) and assess the reasonableness of the value. • Solve division of whole numbers by representing the problem as an unknown factor problem.

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Vocabulary	Resources	Assessment/Project
<p>order of operations</p>	<ul style="list-style-type: none"> ● GOMath Lessons 7.1- 7.11 ● GOMath iTools and eGlossary (Think Central) ● GOMath! Animated Math Models ● Corresponding Go Math! Grab and Go for Activities/Literature/Games ● HMH Mega Math ● Corresponding GOMath! Daily Routines ● https://www-k6.thinkcentral.com/ePC/start.do ● http://www.corestandards.org/Math ● http://www.xtramath.org 	<ul style="list-style-type: none"> ● Ongoing teacher observations (ie exit cards, think, pair share, or numbered heads together) ● Workbook pages ● Center Work and activities ● Mixed Practice and Cumulative Review ● Math Journals ● Do Now's ● Topic/Unit 7 Test
Differentiated Instruction		Interdisciplinary Connections
RTI/ELL	Enrichment	<p>Literature Connection- <u>Corey's Cookie Caper</u>: Students read about how Corey and Carly divide cookies equally among friends and family.</p> <p>Writing- Write a creative story that includes division by 2, 5, or 10.</p>
<ul style="list-style-type: none"> ● Number line ● Grab and GO Kits ● Anchor charts, word wall ● Manipulatives ● Multiple Response ● Reteach Book 	<ul style="list-style-type: none"> ● Math Journals, DO NOWs ● White boards ● Chromebook ● Accountable Talk, Critical Thinking ● Enrichment Book 	

ROCHELLE PARK SCHOOL
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Grade: Third		Content: Mathematics	
Domain: Numbers and Operations – Fractions		Topic: Understand Fractions	Time Frame: 12 days
Standards: 3.NF.A.1 3.NF.A.3c 3.NF.A.2 3.G.A.2 3.NF.A.2b		Focus Mathematical Practices: MP1: Make sense of problems and persevere in solving them. MP4: Model with mathematics. MP5: Use appropriate tools strategically.	PARCC Model Content Framework: Major Content: 3.NF.3c, 3.NF.1, 3.NF.2, 3.NF.2a, 3.NF.2b, Supporting Content: 3.G.2 Additional Content: n/a

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> How can you use fractions to describe how much or how many? What are equal parts of a whole? Why do you need to know how to make equal shares? What do the top and a bottom numbers of a fraction tell? How does a fraction name part of a whole or group? How can you represent and locate fractions on a number line? When might you use a fraction greater than one or a whole number? How can a fraction tell how many are in part of a group? How can you use the strategy <i>draw a diagram</i> to solve fraction problems? 	<ul style="list-style-type: none"> Represent fractions with models (i.e. area model, number line, or set model). Understand that fractions name a quantity just like whole numbers. Develop understanding of fractions as numbers.

Skills	NJDOE Model Curriculum(Student Learning Objectives)
<p>Students will be able to:</p> <ul style="list-style-type: none"> Divide models to make equal shares. Use a fraction to name one part of a whole that is divided into equal parts. Read, write, and model fractions that represent more than one part of a whole that is divided into equal parts. Relate fractions and whole numbers by expressing whole numbers as fractions and recognizing fractions that are equivalent to whole numbers. Model, read, and write fractional parts of a group. Find fractional parts of a group using unit fractions. Solve fraction problems by using the strategy draw a diagram. 	<p>Students will know how to:</p> <ul style="list-style-type: none"> Represent the equal parts of shapes as a unit fraction (e.g., a pizza cut into 8 equal slices has 8 slices and each slice has quantity $\frac{1}{8}$ of the whole pizza). Make a drawing of a number line depicting the position of $\frac{1}{b}$ (with $b= 2, 3, 4, 6,$ and 8). Represent the unit fraction $\frac{1}{4}$ on the number line by dividing the number line between 0 and 1 into 4 equal lengths and naming the point at the end of the first length as the position of unit fraction $\frac{1}{4}$; apply the same method for locating the points $\frac{1}{2}, \frac{1}{3}, \frac{1}{5}, \frac{1}{6}, \frac{1}{8}$ on the number line. Generate and explain whole numbers as fractions, and locate them as fractions on a number line.

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Vocabulary	Resources	Assessment/Project
denominator eighths equal parts fourths fraction fraction greater than 1 halves numerator sixths thirds unit fraction whole	<ul style="list-style-type: none"> ● GOMath Lessons 8.1- 8.9 ● GOMath iTools and eGlossary (Think Central) ● GOMath! Animated Math Models ● Corresponding Go Math! Grab and Go for Activities/Literature/Games ● HMH Mega Math ● Corresponding GOMath! Daily Routines ● https://www-k6.thinkcentral.com/ePC/start.do ● http://www.corestandards.org/Math ● http://www.xtramath.org 	<ul style="list-style-type: none"> ● Ongoing teacher observations (ie exit cards, think, pair share, or numbered heads together) ● Workbook pages ● Center Work and activities ● Mixed Practice and Cumulative Review ● Math Journals ● Do Now's ● Topic/Unit 8 Test
Differentiated Instruction		Interdisciplinary Connections
RTI/ELL	Enrichment	<p>Literature Connection- <u>Pizza Parts</u>: Students read about how to find equal parts to write fractions.</p> <p>Science Connection- Provide students with a globe. Give them an opportunity to compare the amount of land to the amount of water that covers Earth. Have each student estimate whether $\frac{1}{4}$, $\frac{1}{2}$, or $\frac{3}{4}$ of Earth is covered with water. Make a line plot to show the class choices. Discuss the shape of the data in the line plot.</p>
<ul style="list-style-type: none"> ● Number line ● Grab and GO Kits ● Anchor charts, word wall ● Manipulatives ● Multiple Response ● Reteach Book 	<ul style="list-style-type: none"> ● Math Journals, DO NOWs ● White boards ● Chromebook ● Accountable Talk, Critical Thinking ● Enrichment Book 	

**ROCHELLE PARK SCHOOL
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Grade: Third		Content: Mathematics	
Domain: Numbers and Operations – Fractions		Topic: Compare Fractions	Time Frame: 10 days
Standards: 3.NF.A.1 3.NF.A.3a 3.NF.A.2 3.NF.A.3b 3.NF.A.2a 3.NF.A.3c 3.G.A.2b 3.NF.A.3d		Focus Mathematical Practices: MP3: Construct viable arguments and critique the reasoning of others. MP6: Attend to precision. MP8: Look for and express regularity in repeated reasoning.	PARCC Model Content Framework: Major Content: 3.NF.A.1, 3.NF.2, 3.NF.2a, 3.NF.2b, 3.NF.3a, 3.NF.3b, 3.NF.3c, 3.NF.3d Supporting Content: 3.G.2 Additional Content: n/a

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> • How can you compare fractions? • How can you use the strategy act it out to solve comparison problems? • How can you compare fractions with the same denominator? • How can you compare fractions with the same numerator? • What strategies can you use to compare fractions? • How can you compare and order fractions? • How can you use models to find equivalent fractions? • How can you use models to name equivalent fractions? 	<ul style="list-style-type: none"> • Use strategies to compare and order fractions before learning the familiar formal algorithm for finding common denominators. • Look for and make use of structure as it relates to comparing fractions and equivalent fractions. • Develop understanding of fractions as numbers • Compare fractions and find equivalent fractions.

Skills	NJDOE Model Curriculum(Student Learning Objectives)
<p>Students will be able to:</p> <ul style="list-style-type: none"> • Solve comparison problems by using the strategy act it out. • Compare fractions with the same denominator by using models and reasoning strategies. • Compare fractions with the same numerator by using models, reasoning strategies, and strategies involving the size of the pieces in the whole. • Compare and order fractions by using models and reasoning strategies. • Model equivalent fractions by folding paper, using area models, and using number lines. • Generate equivalent fractions by using models. 	<p>Students will know how to:</p> <ul style="list-style-type: none"> • Locate equivalent (equal) fractions on a number line. • Generate and explain equivalent fractions using visual fraction models. • Generate and explain whole numbers as fractions, and locate them as fractions on a number line. • Compare two fractions with the same numerator or the same denominator using the symbols $<$, $=$, $>$. • Interpret the unit fraction $1/b$ as the quantity formed by 1 of b equal parts of a whole and the fraction a/b as the quantity formed by a parts $1/b$; e.g., 3 unit fractions of $1/4$ add to the quantity of $3/4$.

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Vocabulary	Resources	Assessment/Project
<p>equivalent equivalent fractions</p>	<ul style="list-style-type: none"> ● GOMath Lessons 9.1- 9.7 ● GOMath iTools and eGlossary (Think Central) ● GOMath! Animated Math Models ● Corresponding Go Math! Grab and Go for Activities/Literature/Games ● HMH Mega Math ● Corresponding GOMath! Daily Routines ● https://www-k6.thinkcentral.com/ePC/start.do ● http://www.corestandards.org/Math ● http://www.xtramath.org 	<ul style="list-style-type: none"> ● Ongoing teacher observations (ie exit cards, think, pair share, or numbered heads together) ● Workbook pages ● Center Work and activities ● Mixed Practice and Cumulative Review ● Math Journals ● Do Now's ● Topic/Unit 9 Test
Differentiated Instruction		Interdisciplinary Connections
RTI/ELL	Enrichment	<p>Literature Connection- <u>The Whole Picture</u>: Students read the book and model fractional parts.</p> <p>Social Studies Connection- Display a map of the United States that shows the names of all 50 states. Have students identify the states that begin with the letter A and the letter M and create fractions for each group of states. Compare the fractions and ask students whether more state names begin with the letter A or the letter M. Students should explain how they know they are correct.</p>
<ul style="list-style-type: none"> ● Number line ● Grab and GO Kits ● Anchor charts, word wall ● Manipulatives ● Multiple Response ● Reteach Book 	<ul style="list-style-type: none"> ● Math Journals, DO NOWs ● White boards ● Chromebook ● Accountable Talk, Critical Thinking ● Enrichment Book 	

**ROCHELLE PARK SCHOOL
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Grade: Third		Content: Mathematics
Domain: Measurement and Data	Topic: Time, Length, Liquid, Volume, and Mass	Time Frame: 12 days
Standards: 3.MD.A.1 3.MD.A.2 3.MD.B.4 3.OA.C.7 3.OA.D.8 3.NBT.A.2	Focus Mathematical Practices: MP3: Construct viable arguments and critique the reasoning of others. MP6: Attend to precision.	PARCC Model Content Framework: Major Content: 3.MD.1, 3.MD.2, 3.OA.7, 3.OA.8 Supporting Content: 3.MD.4 Additional Content: 3.NBT.2

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> ● How can you tell time, and use measurement to describe the size of something? ● How can you tell time to the nearest minute? ● How can you tell when to use A.M. and P.M. with time? ● How can you measure elapsed time in minutes? ● How can you find a starting time or an ending time when you know the elapsed time? ● How can you use the strategy draw a diagram to solve problems about time? ● How can you generate measurement data and show the data on a line plot? ● How can you estimate and measure liquid volume and mass in metric units? ● How can you use models to solve liquid volume and mass problems? 	<ul style="list-style-type: none"> ● Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. ● Represent and interpret measurement data.

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Skills	NJDOE Model Curriculum(Student Learning Objectives)
<p>Students will be able to:</p> <ul style="list-style-type: none"> ● Read, write, and tell time on analog and digital clocks to the nearest minute. ● Decide when to use A.M and P.M. when telling time to the nearest minute. ● Use a number line or an analog clock to measure time intervals in minutes. ● Use a number line or an analog clock to add or subtract time intervals to find starting times or ending times. ● Solve problems involving addition and subtraction of time intervals by using the strategy draw a diagram. ● Measure length to the nearest half or fourth inch and use measurement data to make a line plot. ● Estimate and measure liquid volume in liters. ● Estimate and measure mass in grams and kilograms. ● Add, subtract, multiply, or divide to solve problems involving liquid volumes or masses. 	<p>Students will know how to:</p> <ul style="list-style-type: none"> ● Depict data measured in fourths and halves of an inch with a line plot with scales marked with appropriate units. ● Tell and write time to the nearest minute to solve word problems with addition and subtraction involving time intervals in minutes. ● Solve one-step word problems by estimating, measuring, and comparing liquid volumes and masses using appropriate tools and units.

Vocabulary	Resources	Assessment/Project
<p>minute A.M. P.M. midnight noon elapsed time liquid volume liter gram, kilogram mass</p>	<ul style="list-style-type: none"> ● GOMath Lessons 10.1- 10.9 ● GOMath iTools and eGlossary (Think Central) ● GOMath! Animated Math Models ● Corresponding Go Math! Grab and Go for Activities/Literature/Games ● HMH Mega Math ● Corresponding GOMath! Daily Routines ● https://www-k6.thinkcentral.com/ePC/start.do ● http://www.corestandards.org/Math ● http://www.xtramath.org 	<ul style="list-style-type: none"> ● Ongoing teacher observations (ie exit cards, think, pair share, or numbered heads together) ● Workbook pages ● Center Work and activities ● Mixed Practice and Cumulative Review ● Math Journals ● Do Now's ● Topic/Unit 10 Test

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Differentiated Instruction		Interdisciplinary Connections
RTI/ELL	Enrichment	
<ul style="list-style-type: none">● Number line● Grab and GO Kits● Anchor charts, word wall● Manipulatives● Multiple Response● Reteach Book	<ul style="list-style-type: none">● Math Journals, DO NOWs● White boards● Chromebook● Accountable Talk, Critical Thinking● Enrichment Book	<p>Literature Connection: <u>Late for School</u>: Students read about Kim's late start and her attempts to get to school on time.</p> <p>Literature Connection: <u>How Heavy? How Much?</u> : Students read about customary units of measures used to buy groceries.</p> <p>Writing: Write a paragraph that uses at least three of these words or phrases: gram, kilogram, liter, mass, liquid volume.</p>

**ROCHELLE PARK SCHOOL
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Grade: Third		Content: Mathematics	
Unit: Measurement and Data		Topic: Perimeter and Area	
Standards: 3.MD.C.5a 3.MD.C.5b 3.MD.C.6 3.MD.C.7a 3.MD.C.7b 3.MD.C.7c 3.MD.C.7d 3.MD.D.8 3.OA.A.3 3.OA.B.5 3.OA.C.7 3.OA.D.9 3.NBT.A.2		Focus Mathematical Practices: MP2: Reason abstractly and quantitatively. MP3: Construct viable arguments and critique the reasoning of others. MP7: Look for and make use of structure.	
		Time Frame: 15 days	
		PARCC Model Content Framework: Major: 3.MD.5a, 3.MD.5b, 3.MD.6, 3.MD.7a, 3.MD.7b, 3.MD.7c, 3.MD.7d, 3.OA.3, 3.OA.5, 3.OA.7, 3.OA.9 Supporting: n/a Additional: 3.NBT.2, 3.MD.8	

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> ● How can you solve problems involving perimeter and area? ● How can you find perimeter? ● How can you measure perimeter? ● How can you find the unknown length of a side in a plane figure when you know its perimeter? ● How is finding the area of a figure different from finding the perimeter of a figure? ● How can you find the area of a plane figure? ● Why can you multiply to find the area of a rectangle? ● How can you use the strategy find a pattern to solve area problems? ● How can you break apart a figure to find the area? ● How can you use area to compare rectangles with the same perimeter? ● How can you use perimeter to compare rectangles with the same area? 	<ul style="list-style-type: none"> ● Understand the difference between area and perimeter. ● Recognize perimeter and area as attributes of plane figures and find ways to measure both attributes. ● Investigate the relationship between perimeter and area. ● Solve real world problems involving area, perimeter, and unknown side lengths.

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Skills	NJDOE Model Curriculum(Student Learning Objectives)
<p>Students will be able to:</p> <ul style="list-style-type: none"> ● Explore perimeter of polygons by counting units on grid paper. ● Estimate and measure perimeter of polygons using inch and centimeter rulers. ● Find the unknown length of a side of a polygon when you know its perimeter. ● Explore perimeter and area as attributes of polygons. ● Estimate and measure area of plane figures by counting unit squares. ● Relate area to addition and multiplication by using area models. ● Solve area problems by using the strategy find a pattern. ● Apply the Distributive Property to area models and to find the area of combined rectangles. ● Compare areas of rectangles that have the same perimeter. Compare perimeters of rectangles that have the same area. 	<p>Students will know how to:</p> <ul style="list-style-type: none"> ● Measure areas by counting unit squares (square centimeters, square meters, square inches, square feet, and improvised units). ● Explain the relationship between tiling/multiplying side lengths to find the area of rectangles. ● Find the area of a plane figure understanding that unit squares are used to measure area of a rectilinear drawing. ● Solve real world and mathematical problems involving perimeter 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. ● Find the area of a rectangular array by counting the number of square units and compare that number with the product of the (whole number) side lengths. ● Use the area model (with rectangles) to explain the Distributive Property. ● 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.

Vocabulary	Resources	Assessment/Project
<p>area perimeter square unit (sq un) unit square</p>	<ul style="list-style-type: none"> ● GOMath Lessons 11.1- 11.10 ● GOMath iTools and eGlossary (Think Central) ● GOMath! Animated Math Models ● Corresponding Go Math! Grab and Go for Activities/Literature/Games ● HMH Mega Math ● Corresponding GOMath! Daily Routines ● https://www-k6.thinkcentral.com/ePC/start.do ● http://www.corestandards.org/Math ● http://www.xtramath.org 	<ul style="list-style-type: none"> ● Ongoing teacher observations (ie exit cards, think, pair share, or numbered heads together) ● Workbook pages ● Center Work and activities ● Mixed Practice and Cumulative Review ● Math Journals ● Do Now's ● Topic/Unit 11 Test

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Differentiated Instruction		Interdisciplinary Connections
RTI/ELL	Enrichment	
<ul style="list-style-type: none"> ● Number line ● Grab and GO Kits ● Anchor charts, word wall ● Manipulatives ● Multiple Response ● Reteach Book 	<ul style="list-style-type: none"> ● Math Journals, DO NOWs ● White boards ● Chromebook ● Accountable Talk, Critical Thinking ● Enrichment Book 	<p>Literature Connection- <u>James' Frames</u>: Students read about using perimeter to find how much wood is needed to make picture frames.</p> <p>Literature Connection- <u>Busy Bees</u>: Students read about the hexagon patterns in honeycombs and other patterns in nature.</p> <p>Writing- Explain how two rectangles can have the same area, but different perimeter. Give an example.</p>

**ROCHELLE PARK SCHOOL
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Grade: Third		Content: Mathematics	
Unit: Measurement and Data		Topic: Two-Dimensional Shapes	
Standards: 3.G.A.1 3.G.A.2 3.NF.A.1 3.NF.A.3d 3.MD.C.5		Focus Mathematical Practices: MP5: Use appropriate tools strategically. MP7: Look for and make use of structure. MP8: Look for and express regularity in repeated reasoning.	
Time Frame: 12 days			
PARCC Model Content Framework: Major Content: 3.NF.1, 3.NF.3d, 3.MD.5 Supporting Content: 3.G.1, 3.G.2 Additional Content: n/a			

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> • What are some ways to describe and classify two-dimensional shapes? • What are some ways to describe two-dimensional shapes? • How can you describe angles in plane shapes? • How can you use line segments and angles to make polygons? • How can you describe line segments that are side polygons? • How can you use sides and angles to help you describe quadrilaterals and triangles? • How can you draw quadrilaterals? • How can you use the strategy draw a diagram to classify plane shapes? • How can you divide shapes into parts with equal areas and write the area as a unit fraction of the whole? 	<ul style="list-style-type: none"> • Define and classify shapes by their attributes. • Understand that shared attributes make larger categories and subcategories. • Partition shapes into parts and express the area as a unit fraction.

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Skills	NJDOE Model Curriculum(Student Learning Objectives)
<p>Students will be able to:</p> <ul style="list-style-type: none"> ● Identify and describe attributes of plane shapes. ● Describe angles in plane shapes. ● Identify polygons by the number of sides they have. ● Determine if lines or line segments are intersecting, perpendicular, or parallel. ● Describe, classify, and compare quadrilaterals based on their sides and angles. ● Draw quadrilaterals. ● Describe and compare triangles based on the number of sides that have equal length and by their angles. ● Solve problems by using the strategy draw a diagram to classify plane shapes. ● Partition shapes into parts with equal areas and express the area as a unit fraction of a whole. 	<p>Students will know how to:</p> <ul style="list-style-type: none"> ● 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.

Vocabulary	Resources	Assessment/Project
angle closed shape line line segment open shape plane shape point polygon ray right angle rectangle parallel lines perpendicular lines Venn Diagram endpoint vertex decagon hexagon octagon pentagon quadrilateral side triangle intersecting lines rhombus square trapezoid two-dimensional shape	<ul style="list-style-type: none"> ● GOMath Lessons 12.1 – 12.9 ● GOMath iTools and eGlossary (Think Central) ● GOMath! Animated Math Models ● Corresponding Go Math! Grab and Go for Activities/Literature/Games ● HMH Mega Math ● Corresponding GOMath! Daily Routines ● https://www-k6.thinkcentral.com/ePC/start.do ● http://www.corestandards.org/Math ● http://www.xtramath.org 	<ul style="list-style-type: none"> ● Ongoing teacher observations (ie exit cards, think, pair share, or numbered heads together) ● Workbook pages ● Center Work and activities ● Mixed Practice and Cumulative Review ● Math Journals ● Do Now's ● Topic/Unit 12 Test

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Differentiated Instruction		Interdisciplinary Connections
RTI/ELL	Enrichment	
<ul style="list-style-type: none">● Number line● Grab and GO Kits● Anchor charts, word wall● Manipulatives● Multiple Response● Reteach Book	<ul style="list-style-type: none">● Math Journals, DO NOWs● White boards● Chromebook● Accountable Talk, Critical Thinking● Enrichment Book	<p>Social Studies Connection- Look at photographs of various North American landmarks. Look for triangles, quadrilaterals, pentagons, hexagons, and octagons. Name each polygon you see and the number of sides it has.</p> <p>Science Connection-Use a mirror and flashlight to act out a light hitting a smooth surface. Using the words parallel, perpendicular, or intersecting, describe what happens to a ray of light when it hits a smooth surface.</p>