

**1st Grade Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

**Marking Period: 1st Nine Weeks**

**Days: Ongoing**

**Reporting Category/Strand: Measurement**

<b>SOL 1.11</b>	<b>The student will use calendar language appropriately (e.g., names of the months, today, yesterday, next week, last week).</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Read a calendar to locate a given day or date.</li> <li>• Identify the months of the year.</li> <li>• Identify the seven days in a week.</li> <li>• Determine the days/dates before and after a given day/date (e.g., yesterday, today, tomorrow).</li> <li>• Determine the date that is a specific number of days or weeks in the past or in the future from a given date, using a calendar.</li> <li>• Identify specific dates (e.g., the third Monday in a given month).</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand how to use a calendar as a way to measure time.</li> </ul>
<b>Essential Questions</b>	How many days are in a week and what are they? How many months in a year and what are they? How many Mondays, Tuesdays, etc. have we had this month? What will tomorrow be, what was yesterday? What will be the date a week from now? What was the date last _____? What was the date on the second Saturday, etc.? How many weeks are in a given month? What year is this?
<b>Primary Resources</b>	<p><a href="#">VDOE Calendar</a> Harcourt Math (Time and Calendar -Chapter 25; Pages 415-423b) <a href="http://www.ixl.com">www.ixl.com</a></p>
<b>Essential Vocabulary</b>	calendar, week, day, date, month, year

**Marking Period: 1st Nine Weeks**

**Days: Ongoing**

**Reporting Category/Strand: Probability and Statistics**

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<b>SOL 1.14</b>	<b>The student will investigate, identify, and describe various forms of data collection (e.g., recording daily temperature, lunch count, attendance, favorite ice cream), using tables, picture graphs, and object graphs.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Investigate various forms of data collection, including counting and tallying, informal surveys, observations, and voting.</li> <li>• Identify and describe various forms of data collection in practical situations (e.g., recording daily temperature, lunch count, attendance, and favorite ice cream.)</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand how data can be collected and presented in an organized manner.</li> <li>• Understand that data gathered and analyzed from observations and surveys can have an impact on our everyday lives.</li> </ul>
<b>Essential Questions</b>	How did you get your data? What information are you getting from this graph? What type of graph did you use?
<b>Primary Resources</b>	<p><a href="#">VDOE Data</a> Harcourt Math- (Chapter 9; pgs. 135-154) <a href="http://www.ixl.com">www.ixl.com</a></p> <p><b>Books:</b> Tally O’Malley by Stuart J. Murphy Tally Cat Keeps Track by Trudy and R.N. Harris</p> <p><a href="#">Math Monsters Data Collection</a></p>
<b>Essential Vocabulary</b>	data, collection, tally marks, tallying, methods of data collection, picture, object and table graphs

**Marking Period: 1st Nine Weeks**

**Days: Ongoing**

**Reporting Category/Strand: Probability and Statistics**

<b>SOL 1.15</b>	<b>The student will interpret information displayed in a picture or object graph, using the vocabulary more, less, fewer,</b>
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	<b>greater than, less than, and equal to.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Compare one category to another in a graph, indicating which has more or which has less, or which is equal to.</li> <li>• Interpret information displayed in object graphs and picture graphs, using the words more, less, fewer, greater than, less than, and equal to.</li> <li>• Find answers to questions, using graphs (e.g., “Which category has more?”, “How many more?”, and “How many in all?”).</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand that picture graphs use pictures to represent and compare data while object graphs use concrete objects to represent and compare data.</li> <li>• Understand that data can be analyzed and interpreted, using the terms more, less, fewer, greater than, less than, and equal to.</li> </ul>
<b>Essential Questions</b>	Which category has more? How many more? How many in all? Which category has the fewest? Are there any categories that are equal?
<b>Primary Resources</b>	<p><a href="#">VDOE Adding and Subtracting</a> <a href="#">VDOE Fact House</a> Harcourt Math (Chapter 9; pgs. 135-154) <a href="http://www.ixl.com">www.ixl.com</a></p> <p><b>Books:</b> Bart’s Amazing Charts by Dianne Ochiltree More or Less by Stuart J. Murphy</p>
<b>Essential Vocabulary</b>	greater than, less than, fewer, less, more, equal,

**Marking Period: 1st Nine Weeks**

**Days: 15**

**Reporting Category/Strand: Number and Number Sense**

<b>SOL 1.1</b>	<b>The student will</b>
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	<p>a) count from 0 to 100 and write the corresponding numerals; and</p> <p>b) group a collection of up to 100 objects into tens and ones and write the corresponding numeral to develop an understanding of place value.</p>
<p><b>Essential Knowledge/Skills/Understandings</b></p>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Count by rote from 0 to 100, using the correct name for each numeral.</li> <li>• Use the correct oral counting sequence to tell how many objects are in a set.</li> <li>• Write numerals correctly.</li> <li>• Write each numeral from 0 to 100.</li> <li>• Read two-digit numbers when shown a numeral, a Base-10 model of the number, or a pictorial representation of the number.</li> <li>• Identify the place value (ones, tens) of each digit in a two digit numeral (e.g., The place value of the 2 in the number 23 is tens. The value of the 2 in the number 23 is 20).</li> <li>• Group a collection of objects into sets of tens and ones. Write the numeral that corresponds to the total number of objects in a given collection of objects that have been grouped into sets of tens and ones.</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Associate oral number names with the correct numeral and set of objects.</li> <li>• Understand that 1 and 10 are special units of numbers (e.g., 10 is 10 ones, but it is also 1 ten).</li> <li>• Understand the ten-to-one relationship of ones and tens (10 ones equals 1 ten).</li> <li>• Understand that numbers are written to show how many tens and how many ones are in the number.</li> <li>• Understand that groups of tens and ones can be used to tell how many.</li> </ul>
<p><b>Essential Questions</b></p>	<p>Can you count and write to 100 by 1's, 2's, 5's, 10's? Can you identify the place value of (2 digit number) What number comes before/after a given number? Can you take this group of objects and group it into tens and ones and write the number?</p>
<p><b>Primary Resources</b></p>	<p><a href="#">VDOE Numbers to 100</a>  <a href="#">VDOE-Numbers to 100</a>  <a href="#">VDOE- Numbers to 100</a>  Harcourt Math- (Chapter 10; pgs. 155-172)  <a href="http://www.ixl.com">www.ixl.com</a>  <b>Books:</b></p>

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	Ten Little Fish by Audrey Wood Mouse Count by Ellen Walsh The Napping House by Audrey Wood Five Little Ducks by Raffi <a href="#">Math Monsters: Counting and Symbolizing</a>
<b>Essential Vocabulary</b>	place value, digit, numeral, tens, ones,

**Marking Period: 1st Nine Weeks**

**Days: 15 to go concurrently with 1.1**

**Reporting Category/Strand: Number and Number Sense**

<b>SOL 1.2</b>	<b>The student will count forward by ones, twos, fives, and tens to 100 and backward by ones from 30.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Count by ones, twos, fives, and tens to 100, using concrete objects, such as counters, connecting cubes, pennies, nickels, and dimes.</li> <li>• Demonstrate a one-to-one correspondence when counting by ones with concrete objects or representations.</li> <li>• Skip count orally by twos, fives and tens to 100 starting at various multiples of 2, 5, or 10.</li> <li>• Count backward by ones from 30.</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand that collections of objects can be grouped and skip counting can be used to count the collection.</li> <li>• Describe patterns in counting by ones (both forward and backward) and skip counting and use those patterns to predict the next number in the counting sequence.</li> </ul>
<b>Essential Questions</b>	Given a counting pattern, can you identify what pattern it is?
<b>Primary Resources</b>	<a href="#">VDOE- Counting</a> Harcourt Math- (Chapter 12; pgs. 191-202) <a href="http://www.ixl.com">www.ixl.com</a> Number Rhymes Tens and Teens by Opal Dunn

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	Eggs and Legs by Michael Dahl Lots of Ladybugs by Michael Dahl Toasty Toes Counting by Tens by Michael Dahl
<b>Essential Vocabulary</b>	forward, backward, skip counting, number patterns

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**Days: 15**

**Reporting Category/Strand: Number and Number Sense**

<b>SOL 1.1b</b>	<b>b) group a collection of up to 100 objects into tens and ones and write the corresponding numeral to develop an understanding of place value.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b></p> <ul style="list-style-type: none"> <li>• Read two-digit numbers when shown a numeral, a Base-10 model of the number, or a pictorial representation of the number.</li> <li>• Identify the place value (ones, tens) of each digit in a two-digit numeral (e.g., The place value of the 2 in the number 23 is tens. The value of the 2 in the number 23 is 20).</li> <li>• Group a collection of objects into sets of tens and ones. Write the numeral that corresponds to the total number of objects in a given collection of objects that have been grouped into sets of tens and ones.</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Associate oral number names with the correct numeral and set of objects.</li> <li>• Understand that 1 and 10 are special units of numbers (e.g., 10 is 10 ones, but it is also 1ten).</li> <li>• Understand the ten-to-one relationship of ones and tens (10 ones equals 1 ten).</li> <li>• Understand that numbers are written to show how many tens and how many ones are in the number.</li> <li>• Understand that groups of tens and ones can be used to tell how many.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><a href="http://www.ixl.com">www.ixl.com</a></p> <p><b>Books:</b> Sir Cumference and All the King's Tens by Cindy Neuschwander</p>

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	a Place For Zero by Angeline Sparagna LoPresti <a href="#">Math Monsters: The Making of Tens</a>
<b>Essential Vocabulary</b>	

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**Days: 12**

**Reporting Category/Strand: Patterns, Functions, and Algebra**

<b>SOL 1.17</b>	<b>The student will recognize, describe, extend, and create a wide variety of growing and repeating patterns.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Recognize the pattern in a given rhythmic, color, geometric figure, or numerical sequence.</li> <li>• Describe the pattern in a given rhythmic, color, geometric figure, or numerical sequence in terms of the core (the part of the sequence that repeats).</li> <li>• Extend a pattern, using manipulatives, geometric figures, numbers, or calculators.</li> <li>• Transfer a pattern from one form to another.</li> <li>• Create a repeating or growing pattern, using manipulatives, geometric figures, numbers, or calculators (e.g., the growing patterns 2, 3, 2, 4, 2, 5, 2, 6, 2, ...).</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand that patterns are a way to recognize order, to organize their world, and to predict what comes next in an arrangement.</li> <li>• Recognize and state the core of a pattern.</li> <li>• Analyze how both repeating and growing patterns are generated.</li> </ul>
<b>Essential Questions</b>	Can you identify the pattern ? Describe the pattern. Can you tell what part of the pattern is repeating? Can you extend this pattern? Can you transfer a pattern from one form to another? ex. red, blue, red, blue would be a b a b Given a set of manipulatives or numbers, can the student create a growing pattern? a repeating pattern?
<b>Primary Resources</b>	<a href="#">VDOE-Patterns</a>

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	<p>Harcourt Math- (Chapter 17; pgs. 281-296)  <a href="http://www.ixl.com">www.ixl.com</a>  <b>Books:</b>          Lots and Lots Zebra Stripes; Patterns in Nature          Pattern Bugs by Trudy Harris          Pattern Fish by Trudy Harris  <a href="#">Math Monsters: Patterns</a></p>
<b>Essential Vocabulary</b>	repeating patterns, extend, describe, create, recognize, growing pattern, pattern unit

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**Days: 12**

**Reporting Category/Strand: Patterns, Functions, and Algebra**

<b>SOL 1.16</b>	<b>The student will sort and classify concrete objects according to one or more attributes, including color, size, shape, and thickness.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b>          The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Sort and classify objects into appropriate subsets (categories) based on one or two attributes, such as size, shape, color, or thickness.</li> </ul> <p><b>Essential Understanding</b>          All students should</p> <ul style="list-style-type: none"> <li>• Understand the same set of objects can be sorted and classified in different ways.</li> </ul>
<b>Essential Questions</b>	Given a group of objects, the student will answer questions such as: How are these alike, different? When sorting, which attribute are you using?
<b>Primary Resources</b>	<p><a href="#">VDOE-Patterns</a>          Harcourt Math- (Chapter 17; pgs. 281-296)  <a href="http://www.ixl.com">www.ixl.com</a>  <b>Books:</b>          Lots and Lots Zebra Stripes; Patterns in Nature</p>



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	Pattern Bugs by Trudy Harris Pattern Fish by Trudy Harris <a href="#">Math Monsters: Patterns</a>
<b>Essential Vocabulary</b>	attributes, size, shape, color, thickness, sort, classify

**Marking Period: 2nd Nine Weeks**

**Days: Ongoing**

**Reporting Category/Strand: Measurement**

<b>SOL 1.11</b>	<b>The student will use calendar language appropriately (e.g., names of the months, today, yesterday, next week, last week).</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Read a calendar to locate a given day or date.</li> <li>• Identify the months of the year.</li> <li>• Identify the seven days in a week.</li> <li>• Determine the days/dates before and after a given day/date (e.g., yesterday, today, tomorrow).</li> <li>• Determine the date that is a specific number of days or weeks in the past or in the future from a given date, using a calendar.</li> <li>• Identify specific dates (e.g., the third Monday in a given month).</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand how to use a calendar as a way to measure time.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<a href="#">VDOE Calendar</a> <a href="http://www.ixl.com">www.ixl.com</a>
<b>Essential Vocabulary</b>	

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**Marking Period: 2nd Nine Weeks**

**Days: Ongoing**

**Reporting Category/Strand: Probability and Statistics**

<b>SOL 1.14</b>	<b>The student will investigate, identify, and describe various forms of data collection (e.g., recording daily temperature, lunch count, attendance, favorite ice cream), using tables, picture graphs, and object graphs.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Investigate various forms of data collection, including counting and tallying, informal surveys, observations, and voting.</li> <li>• Identify and describe various forms of data collection in practical situations (e.g., recording daily temperature, lunch count, attendance, and favorite ice cream.)</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand how data can be collected and presented in an organized manner.</li> <li>• Understand that data gathered and analyzed from observations and surveys can have an impact on our everyday lives.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<a href="http://www.ixl.com">VDOE- Data Collection www.ixl.com</a>
<b>Essential Vocabulary</b>	

**Marking Period: 2nd Nine Weeks**

**Days: Ongoing**

**Reporting Category/Strand: Probability and Statistics**

<b>SOL 1.15</b>	<b>The student will interpret information displayed in a picture or object graph, using the vocabulary more, less, fewer, greater than, less than, and equal to.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations</p>

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	<p>to</p> <ul style="list-style-type: none"> <li>• Compare one category to another in a graph, indicating which has more or which has less, or which is equal to.</li> <li>• Interpret information displayed in object graphs and picture graphs, using the words more, less, fewer, greater than, less than, and equal to.</li> <li>• Find answers to questions, using graphs (e.g., “Which category has more?”, “How many more?”, and “How many in all?”).</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand that picture graphs use pictures to represent and compare data while object graphs use concrete objects to represent and compare data.</li> <li>• Understand that data can be analyzed and interpreted, using the terms more, less, fewer, greater than, less than, and equal to.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><a href="#">VDOE Data</a> <a href="http://www.ixl.com">www.ixl.com</a></p>
<b>Essential Vocabulary</b>	

**Marking Period: 2nd Nine Weeks**

**Days: 20 and ongoing**

**Reporting Category/Strand: Computation and Estimation**

<b>SOL 1.5</b>	<b>The student will recall basic addition facts with sums to 18 or less and the corresponding subtraction facts.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Identify + as a symbol for addition, – as a symbol for subtraction, and = as a symbol for equality.</li> <li>• Recall and state orally the basic addition facts for sums with two addends to 18 or less and the corresponding subtraction facts.</li> <li>• Recall and write the basic addition facts for sums to 18 or less and the corresponding subtraction facts, when addition or subtraction problems are presented in either horizontal or vertical written format.</li> </ul> <p><b>Essential Understanding</b></p>

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	<p>All students should</p> <ul style="list-style-type: none"> <li>• Develop an understanding of the addition and subtraction relationship.</li> <li>• Develop addition and subtraction strategies for fact recall.</li> <li>• Develop fluency with basic number combinations for addition and subtraction.</li> </ul>
<b>Essential Questions</b>	<p>What is the symbol for addition? for subtraction? for equality? Using flashcards, can the student recall basic addition/subtraction facts to 18? Can you answer addition/subtraction problems written horizontally and vertically?</p>
<b>Primary Resources</b>	<p>Harcourt Math- (Chapter 1; pgs. 1-14), (Chapter 3; pgs. 31-40)  <a href="http://www.ixl.com">www.ixl.com</a>  <b>Books:</b>            If You Were a Plus Sign by Trisha Speed Shaskan            Dealing With Addition by Lynette Long            Sea Sums by Joy N. Hulme            Five Green and Speckled Frogs by Constanza Basaluzzo            If You Were a Minus Sign by trisha Speed Shaskan</p>
<b>Essential Vocabulary</b>	<p>addition, adding, subtraction, subtracting, minus, difference, sum, equal, equality, symbol</p>

**Marking Period: 2nd Nine Weeks**

**Days: 10 and ongoing**

**Reporting Category/Strand: Computation and Estimation**

<b>SOL 1.6</b>	<p><b>The student will create and solve one-step story and picture problems using basic addition facts with sums to 18 or less and the corresponding subtraction facts.</b></p>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b>            The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Interpret and solve oral or written story and picture problems involving one-step solutions, using basic addition and subtraction facts (sums to 18 or less and the corresponding subtraction facts).</li> <li>• Identify a correct number sentence to solve an oral or written story and picture problem, selecting from among basic addition and subtraction facts.</li> </ul>

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	<p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand various meanings of addition and subtraction in a variety of situations.</li> <li>• Understand that creating and solving problems involves the use of addition and/or subtraction.</li> </ul>
<b>Essential Questions</b>	Which operation (addition or subtraction) would you use to solve this problem? Can you write a number sentence that would solve this problem?
<b>Primary Resources</b>	<p><a href="#">VDOE-Story Problems</a> Harcourt Math- (Problem Solving; pages at the end of each chapter) <a href="http://www.ixl.com">www.ixl.com</a> <b>Books:</b> Math-terpieces: The Art of Problem Solving by Greg Tang</p>
<b>Essential Vocabulary</b>	addition, subtraction, difference,

**Marking Period: 2nd Nine Weeks**

**Days: Ongoing with addition and subtraction**

**Reporting Category/Strand: Patterns, Functions and Algebra**

<b>SOL 1.18</b>	<b>The student will demonstrate an understanding of equality through the use of the equal sign.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Identify the equality (=) symbol.</li> <li>• Recognize that the equations <math>4 + 2 = 2 + 4</math> and <math>6 + 1 = 4 + 3</math> represent the relationship between two expressions of equal value.</li> <li>• Model an equation that represents the relationship of two expressions of equal value.</li> <li>• Identify equivalent values (e.g., <math>3 = 3</math>, <math>4 + 3 = 8 - 1</math>, <math>7 = 2 + 5</math>, etc.).</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand that the equal sign means “is the same as” or “another name for” or “equal in value”.</li> <li>• Understand that equality represents a balance concept. Both sides of the equation balance because they are equal (they have the same value).</li> </ul>

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<b>Essential Questions</b>	What symbol means the same as or equal?
<b>Primary Resources</b>	<a href="#">VDOE-Equivalence</a> <a href="http://www.ixl.com">www.ixl.com</a>  <a href="#">Math Monsters equivalency</a>
<b>Essential Vocabulary</b>	equal, equality, the equal sign

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**Days: 5**

**Reporting Category/Strand: Computation and Estimation**

<b>SOL 1.4</b>	<b>The student, given a familiar problem situation involving magnitude, will</b> <b>a) select a reasonable order of magnitude from three given quantities: a one-digit numeral, a two-digit numeral, and a three digit numeral (e.g., 5, 50, 500); and</b> <b>b) explain the reasonableness of the choice.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to <ul style="list-style-type: none"> <li>• Select a reasonable order of magnitude for a given set from three given quantities: a one-digit numeral, a two-digit numeral, and a three-digit numeral (e.g., 5, 50, and 500 jelly beans in jars) in a familiar problem situation.</li> <li>• Given a familiar problem situation involving magnitude, explain why a particular estimate was chosen as the most reasonable from three given quantities: a one-digit numeral, a two-digit numeral, and a three-digit numeral.</li> </ul> <b>Essential Understanding</b> All students should <ul style="list-style-type: none"> <li>• Develop an understanding of the order of magnitude (size) of whole numbers and use this knowledge to estimate quantities.</li> </ul>
<b>Essential Questions</b>	The teacher will ask about how many or about how much given a problem situation.
<b>Primary Resources</b>	<a href="http://www.ixl.com">www.ixl.com</a> <b>Books:</b>

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	How Many Seeds in a Pumpkin? by Margaret McNamara
<b>Essential Vocabulary</b>	magnitude, reasonable, estimate

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**Days: 8**

**Reporting Category/Strand: Numbers and Number Sense**

<b>SOL 1.3</b>	<b>The student will identify the parts of a set and/or region that represent fractions for halves, thirds, and fourths and write the fractions.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>● Represent a whole to show it having two equal parts and identify one-half (<math>1/2</math>), and two halves (<math>2/2</math>).</li> <li>● Represent a whole to show it having three equal parts and identify one-third (<math>1/3</math>), two-thirds (<math>2/3</math>) and three-thirds (<math>3/3</math>).</li> <li>● Represent a whole to show it having four equal parts and identify one-fourth (<math>1/4</math>), two-fourths (<math>2/4</math>), three-fourths (<math>3/4</math>) and four-fourths (<math>4/4</math>).</li> <li>● Identify and model halves, thirds, and fourths of a whole, using the set model (e.g., connecting cubes and counters), and region/area models (e.g., pie pieces, pattern blocks, geoboards, paper folding, and drawings).</li> <li>● Name and write fractions represented by drawings or concrete materials for halves, thirds, and fourths.</li> <li>● Represent a given fraction using concrete materials, pictures, and symbols for halves, thirds, and fourths. For example, write the symbol for one-fourth, and represent it with concrete materials and pictures</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand that a fraction represents a part of a whole.</li> <li>• Understand that fractional parts are equal shares of a whole.</li> <li>• Understand that the fraction name (half, third, fourth) tells the number of equal parts in the whole.</li> </ul>
<b>Essential Questions</b>	What fraction does this drawing represent? Given a fraction, can the student draw a representation?
<b>Primary Resources</b>	<a href="#">VDOE-Fractions</a> Harcourt Math- (Chapter 21; pgs. 349-364)

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	<a href="http://www.ixl.com">www.ixl.com</a> Books: The Wishing Club, A Story About Fractions by Donna Jo Napoli If You Were a Fraction by Trisha Shaskan Whole-y Cow! Fractions Are Fun by Taryn Souders
<b>Essential Vocabulary</b>	fraction, halves, thirds, fourths, whole, equal parts,

**Marking Period: 3rd Nine Weeks**

**Days: Ongoing**

**Reporting Category/Strand: Measurement**

<b>SOL 1.11</b>	<b>The student will use calendar language appropriately (e.g., names of the months, today, yesterday, next week, last week).</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b>            The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Read a calendar to locate a given day or date.</li> <li>• Identify the months of the year.</li> <li>• Identify the seven days in a week.</li> <li>• Determine the days/dates before and after a given day/date (e.g., yesterday, today, tomorrow).</li> <li>• Determine the date that is a specific number of days or weeks in the past or in the future from a given date, using a calendar.</li> <li>• Identify specific dates (e.g., the third Monday in a given month).</li> </ul> <p><b>Essential Understanding</b>            All students should</p> <ul style="list-style-type: none"> <li>• Understand how to use a calendar as a way to measure time.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<a href="http://www.ixl.com">www.ixl.com</a>
<b>Essential Vocabulary</b>	



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**Marking Period: 3rd Nine Weeks**

**Days: Ongoing**

**Reporting Category/Strand: Probability and Statistics**

<b>SOL 1.14</b>	<b>The student will investigate, identify, and describe various forms of data collection (e.g., recording daily temperature, lunch count, attendance, favorite ice cream), using tables, picture graphs, and object graphs.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Investigate various forms of data collection, including counting and tallying, informal surveys, observations, and voting.</li> <li>• Identify and describe various forms of data collection in practical situations (e.g., recording daily temperature, lunch count, attendance, and favorite ice cream.)</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand how data can be collected and presented in an organized manner.</li> <li>• Understand that data gathered and analyzed from observations and surveys can have an impact on our everyday lives.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	
<b>Essential Vocabulary</b>	

**Marking Period: 3rd Nine Weeks**

**Days: Ongoing**

**Reporting Category/Strand: Probability and Statistics**

<b>SOL 1.15</b>	<b>The student will interpret information displayed in a picture or object graph, using the vocabulary more, less, fewer, greater than, less than, and equal to.</b>
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<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Compare one category to another in a graph, indicating which has more or which has less, or which is equal to.</li> <li>• Interpret information displayed in object graphs and picture graphs, using the words more, less, fewer, greater than, less than, and equal to.</li> <li>• Find answers to questions, using graphs (e.g., “Which category has more?”, “How many more?”, and “How many in all?”).</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand that picture graphs use pictures to represent and compare data while object graphs use concrete objects to represent and compare data.</li> <li>• Understand that data can be analyzed and interpreted, using the terms more, less, fewer, greater than, less than, and equal to.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<a href="http://www.ixl.com">www.ixl.com</a>
<b>Essential Vocabulary</b>	

**Marking Period: 3rd Nine Weeks**

**Days: 5 and ongoing**

**Reporting Category/Strand: Computation and Estimation**

<b>SOL 1.5</b>	<b>The student will recall basic addition facts with sums to 18 or less and the corresponding subtraction facts. (Memorizing facts: times test)</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Identify + as a symbol for addition, – as a symbol for subtraction, and = as a symbol for equality.</li> <li>• Recall and state orally the basic addition facts for sums with two addends to 18 or less and the corresponding subtraction facts.</li> <li>• Recall and write the basic addition facts for sums to 18 or less and the corresponding subtraction facts, when addition or subtraction problems are presented in either horizontal or vertical written format.</li> </ul>

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	<p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Develop an understanding of the addition and subtraction relationship.</li> <li>• Develop addition and subtraction strategies for fact recall.</li> <li>• Develop fluency with basic number combinations for addition and subtraction.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	Harcourt Math- (Chapter 2; pgs. 15-30), (Chapter 3; pgs. 41-54) <a href="http://www.ixl.com">www.ixl.com</a>
<b>Essential Vocabulary</b>	

**Marking Period: 3rd Nine Weeks**

**Days: 2 and ongoing with morning work and homework**

**Reporting Category/Strand:**

<b>SOL 1.6</b>	<b>The student will create and solve one-step story and picture problems using basic addition facts with sums to 18 or less and the corresponding subtraction facts. (Mixed addition and subtraction word problems)</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Interpret and solve oral or written story and picture problems involving one-step solutions, using basic addition and subtraction facts (sums to 18 or less and the corresponding subtraction facts).</li> <li>• Identify a correct number sentence to solve an oral or written story and picture problem, selecting from among basic addition and subtraction facts.</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand various meanings of addition and subtraction in a variety of situations.</li> <li>• Understand that creating and solving problems involves the use of addition and/or subtraction.</li> </ul>
<b>Essential Questions</b>	

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<b>Primary Resources</b>	<a href="http://www.ixl.com">www.ixl.com</a>
<b>Essential Vocabulary</b>	

**Marking Period: 3rd Nine Weeks**

**Days: 15**

**Reporting Category/Strand: Measurement (Money)**

<b>SOL 1.7</b>	<p><b>The student will</b></p> <p>a) identify the number of pennies equivalent to a nickel, a dime, and a quarter; and</p> <p>b) determine the value of a collection of pennies, nickels, and dimes whose total value is 100 cents or less.</p>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Identify the value of a nickel, a dime, and a quarter in terms of pennies.</li> <li>• Recognize the characteristics of pennies, nickels, and dimes (e.g., color, size).</li> <li>• Count by ones to determine the value of a collection of pennies whose total value is 100 cents or less.</li> <li>• Count by fives to determine the value of a collection of nickels whose total value is 100 cents or less.</li> <li>• Count by tens to determine the value of a collection of dimes whose total value is 100 cents or less.</li> <li>• Count by ones, fives, and tens to determine the value of a collection of pennies and nickels, pennies and dimes, and nickels and dimes whose total value is 100 cents or less.</li> <li>• Count by ones, fives, and tens to determine the value of a collection of pennies, nickels, and dimes whose total value is 100 cents or less.</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Develop an understanding of exchanging the appropriate number of pennies for a nickel, a dime, or a quarter.</li> <li>• Develop an understanding of place value by skip counting a collection of coins by ones, fives, and tens.</li> </ul>
<b>Essential Questions</b>	Can you identify these coins? Can you count this group of coins and determine the value?
<b>Primary Resources</b>	<a href="#">VDOE- Money</a> Harcourt Math- (Chapter 22; pgs. 365-398)

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	<a href="http://www.ixl.com">www.ixl.com</a> <b>Books:</b> A Chair For My Mother by Vera Williams You Can't Buy a Dinosaur With a Dime by Harriet Ziefert Pigs Go To Market by Amy Axel Benny' Pennies by Pat Brisson Alexander, Who Used to Be Rich Last Sunday by Silver Burdett
<b>Essential Vocabulary</b>	money, penny, nickel, dime, quarter, coins, value,

**Marking Period: 3rd Nine Weeks**

**Days: 10**

**Reporting Category/Strand: Measurement (Time)**

<b>SOL 1.8</b>	<b>The student will tell time to the half-hour, using analog and digital clocks.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b>            The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Tell time shown on an analog clock to the half-hour.</li> <li>• Tell time shown on a digital clock to the half-hour.</li> <li>• Match a written time to the time shown on a digital and analog clock to the half-hour.</li> </ul> <p><b>Essential Understanding</b>            All students should</p> <ul style="list-style-type: none"> <li>• Understand how to tell time to the half-hour, using an analog and digital clock.</li> <li>• Understand the concepts of a.m., p.m., minutes, and hours.</li> <li>• Understand that there are sixty minutes in an hour.</li> </ul>
<b>Essential Questions</b>	How many minutes make an hour? How many minutes make a half-hour? Write the time that is shown on these clocks? (analog) Given a digital clock, can the student draw the corresponding time on an analog clock?
<b>Primary Resources</b>	<a href="#">VDOE-Time</a> Harcourt Math- (Chapter 24-pgs. 399-428)

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	<a href="http://www.ixl.com">www.ixl.com</a> <b>Books:</b> It's About Time by Stuart Murphy Clocks and More Clocks by Pat Hutchins The Grouchy Ladybug by Eric Carle What Time is it Mr. Crocodile by Judy Sierra
<b>Essential Vocabulary</b>	digital, analogue, time, half-hour, hour, minutes

**Marking Period: 3rd Nine Weeks**

**Days: 10**

**Reporting Category/Strand: Measurement (Nonstandard)**

<b>SOL 1.9</b>	<b>The student will use nonstandard units to measure length, weight/mass, and volume.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b>          The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Measure the length of objects, using various nonstandard units (e.g., connecting cubes, paper clips, erasers).</li> <li>• Measure the weight/mass of objects, using a balance scale with various nonstandard units (e.g., paper clips, bean bags, cubes).</li> <li>• Measure the volume of objects, using various nonstandard units (e.g., connecting cubes, blocks, rice, water).</li> </ul> <p><b>Essential Understanding</b>          All students should</p> <ul style="list-style-type: none"> <li>• Understand that measurement involves comparing an attribute of an object to the same attribute of the unit of measurement (e.g., the length of a cube measures the length of a book. The weight/mass of the cube measures the weight/mass of the book. The volume of the cube measures the volume of a book).</li> <li>• Understand how to measure length, weight/mass, and volume using various nonstandard units of measurement.</li> </ul>
<b>Essential Questions</b>	Can the student measure the length of a given object using nonstandard units? Can the student pick the appropriate tool to measure length or weight or volume?
<b>Primary Resources</b>	<a href="#">VDOE- Nonstandard</a> Harcourt Math- (Chapter 26; pgs. 437-484) <a href="http://www.ixl.com">www.ixl.com</a>

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	<b>Books:</b> The Enormous Carrot by Vladimir Vagin Inch by Inch by Leo Lionni Inchworm and a Half by Elinor Pinczes
<b>Essential Vocabulary</b>	nonstandard, length, weight, mass, volume, measure, balance scale

**Marking Period: 3rd Nine Weeks**

**Days: 10 concurrent with 1.9**

**Reporting Category/Strand: Measurement (Nonstandard)**

<b>SOL 1.10</b>	<b>The student will compare, using the concepts of more, less, and equivalent,</b> <b>a) the volumes of two given containers; and</b> <b>b) the weight/mass of two objects, using a balance scale.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to <ul style="list-style-type: none"> <li>• Compare the volumes of two containers to determine if the volume of one is more, less, or equivalent to the other, using nonstandard units of measure (e.g., a spoonful or scoopful).</li> <li>• Compare the volumes of two containers to determine if the volume of one is more, less, or equivalent to the other by pouring the contents of one container into the other.</li> <li>• Compare the weight/mass of two objects, using the terms lighter, heavier, or the same, using a balance scale. The pan containing less weight/mass will rise and the pan containing more weight/mass will fall. If the objects are of equivalent weight/mass, the two pans will balance.</li> </ul> <b>Essential Understanding</b> All students should <ul style="list-style-type: none"> <li>• Understand how to fill containers with objects to determine their volume and compare the volumes of two containers.</li> <li>• Understand that a balance scale can be used to compare the weights of two objects using the terms more, less, or equivalent.</li> </ul>
<b>Essential Questions</b>	Using hands on activities, is the student able to compare the volume, weight and mass of 2 objects using the various vocabulary associate with this SOL?

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<b>Primary Resources</b>	<a href="#">VDOE-Weight</a> Harcourt Math- (Chapter 26; pgs. 437-484) <a href="http://www.ixl.com">www.ixl.com</a>
<b>Essential Vocabulary</b>	compare, more than, less than, equivalent to, volume, weight, mass, lighter, heavier, same, balance scale

**Marking Period: 4th Nine Weeks**

**Days: 10 and ongoing**

**Reporting Category/Strand: Measurement (Calendar)**

<b>SOL 1.11</b>	<b>The student will use calendar language appropriately (e.g., names of the months, today, yesterday, next week, last week).</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Read a calendar to locate a given day or date.</li> <li>• Identify the months of the year.</li> <li>• Identify the seven days in a week.</li> <li>• Determine the days/dates before and after a given day/date (e.g., yesterday, today, tomorrow).</li> <li>• Determine the date that is a specific number of days or weeks in the past or in the future from a given date, using a calendar.</li> <li>• Identify specific dates (e.g., the third Monday in a given month).</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand how to use a calendar as a way to measure time.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<a href="http://www.ixl.com">www.ixl.com</a>
<b>Essential Vocabulary</b>	

**Marking Period: 4th Nine Weeks**



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**Days: 10 and concurrent with 1.11**

**Reporting Category/Strand: Probability and Statistics**

<b>SOL 1.14</b>	<b>The student will investigate, identify, and describe various forms of data collection (e.g., recording daily temperature, lunch count, attendance, favorite ice cream), using tables, picture graphs, and object graphs.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Investigate various forms of data collection, including counting and tallying, informal surveys, observations, and voting.</li> <li>• Identify and describe various forms of data collection in practical situations (e.g., recording daily temperature, lunch count, attendance, and favorite ice cream.)</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand how data can be collected and presented in an organized manner.</li> <li>• Understand that data gathered and analyzed from observations and surveys can have an impact on our everyday lives.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<a href="http://www.ixl.com">www.ixl.com</a>
<b>Essential Vocabulary</b>	

**Marking Period: 4th Nine Weeks**

**Days: 10 concurrent with 1.11 and 1.14**

**Reporting Category/Strand: Probability and Statistics**

<b>SOL 1.15</b>	<b>The student will interpret information displayed in a picture or object graph, using the vocabulary more, less, fewer, greater than, less than, and equal to.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Compare one category to another in a graph, indicating which has more or which has less, or which is equal to.</li> </ul>

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	<ul style="list-style-type: none"> <li>• Interpret information displayed in object graphs and picture graphs, using the words more, less, fewer, greater than, less than, and equal to.</li> <li>• Find answers to questions, using graphs (e.g., “Which category has more?”, “How many more?”, and “How many in all?”).</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand that picture graphs use pictures to represent and compare data while object graphs use concrete objects to represent and compare data.</li> <li>• Understand that data can be analyzed and interpreted, using the terms more, less, fewer, greater than, less than, and equal to.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<a href="http://www.ixl.com">www.ixl.com</a>
<b>Essential Vocabulary</b>	

**Marking Period: 4th Nine Weeks**

**Days: 5**

**Reporting Category/Strand: Geometry**

<b>SOL 1.12</b>	<b>The student will identify and trace, describe, and sort plane geometric figures (triangle, square, rectangle, and circle) according to number of sides, vertices, and right angles.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Describe a circle.</li> <li>• Trace triangles, squares, rectangles, and circles.</li> <li>• Describe triangles, squares, and rectangles by the number of sides, vertices, and right angles.</li> <li>• Sort plane geometric figures into appropriate subsets (categories) based on characteristics (number of sides, vertices, angles, curved, etc.).</li> <li>• Identify the name of the geometric figure when given information about the number of sides, vertices, and right angles.</li> </ul> <p><b>Essential Understanding</b> All students should</p>

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	<ul style="list-style-type: none"> <li>• Develop strategies to sort and/or group plane geometric figures and refine the vocabulary used to explain their strategies.</li> </ul>
<b>Essential Questions</b>	Given a set of geometric figures, can the student identify the name, number of vertices, faces, sides and is there a right angle? Can the student sort a group of shapes using these above named attributes and explain why they put the shapes in that category?
<b>Primary Resources</b>	<a href="#">VDOE-Shapes</a> Harcourt Math- (Chapter 15; pgs. 249-264) <a href="http://www.ixl.com">www.ixl.com</a> <b>Books:</b> Icky Bug Shapes by Jerry Pallotta
<b>Essential Vocabulary</b>	triangle, square, circle, rectangle, vertices, right angles, trace, describe, sort geometric

**Marking Period: 4th Nine Weeks**

**Days: 5**

**Reporting Category/Strand: Geometry**

<b>SOL 1.13</b>	<b>The student will construct, model, and describe objects in the environment as geometric shapes (triangle, rectangle, square, and circle) and explain the reasonableness of each choice.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b>            The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Construct plane geometric figures.</li> <li>• Identify models of representations of circles, squares, rectangles, and triangles in the environment at school and home and tell why they represent those figures.</li> <li>• Describe representations of circles, squares, rectangles, and triangles in the environment and explain the reasonableness of the choice.</li> </ul> <p><b>Essential Understanding</b>            All students should</p> <ul style="list-style-type: none"> <li>• Understand that geometric figures are integral parts of the environment.</li> <li>• Use familiarity with the figure, structure, and location to develop spatial reasoning.</li> </ul>

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<b>Essential Questions</b>	Given a shape/or a shape's name, can the student find a representation of it in the environment?
<b>Primary Resources</b>	<a href="#">VDOE-Shapes</a> Harcourt Math- (Chapter 15; pgs. 249-264) <a href="http://www.ixl.com">www.ixl.com</a>
<b>Essential Vocabulary</b>	environment, polygon, hexagon, pentagon

**Marking Period: 4th Nine Weeks**

**Days: 20**

**Reporting Category/Strand: Computation and Estimation**

<b>SOL 1.6</b>	<b>The student will create and solve one-step story and picture problems using basic addition facts with sums to 18 or less and the corresponding subtraction facts. (Mixed addition and subtraction)</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Interpret and solve oral or written story and picture problems involving one-step solutions, using basic addition and subtraction facts (sums to 18 or less and the corresponding subtraction facts).</li> <li>• Identify a correct number sentence to solve an oral or written story and picture problem, selecting from among basic addition and subtraction facts.</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Understand various meanings of addition and subtraction in a variety of situations.</li> <li>• Understand that creating and solving problems involves the use of addition and/or subtraction.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<a href="http://www.ixl.com">www.ixl.com</a>
<b>Essential Vocabulary</b>	

**Marking Period: 4th Nine Weeks**

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**Days: 20 concurrent with 1.6**

**Reporting Category/Strand: Computation and Estimation**

<b>SOL 1.5</b>	<b>The student will recall basic addition facts with sums to 18 or less and the corresponding subtraction facts.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p><b>Essential Knowledge and Skills</b> The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to</p> <ul style="list-style-type: none"> <li>• Identify + as a symbol for addition, – as a symbol for subtraction, and = as a symbol for equality.</li> <li>• Recall and state orally the basic addition facts for sums with two addends to 18 or less and the corresponding subtraction facts.</li> <li>• Recall and write the basic addition facts for sums to 18 or less and the corresponding subtraction facts, when addition or subtraction problems are presented in either horizontal or vertical written format.</li> </ul> <p><b>Essential Understanding</b> All students should</p> <ul style="list-style-type: none"> <li>• Develop an understanding of the addition and subtraction relationship.</li> <li>• Develop addition and subtraction strategies for fact recall.</li> <li>• Develop fluency with basic number combinations for addition and subtraction.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	Harcourt Math- (Chapter 5; pgs. 69-82), ( Chapter 7; pgs. 101-112) <a href="http://www.ixl.com">www.ixl.com</a>
<b>Essential Vocabulary</b>	