



First Nine Weeks – Topics and Concepts to be covered during the first quarter of the year

Tennessee Standards The Major Work of the Grade are bolded.	Learning Outcomes The Major Work of the Grade are bolded.	Content
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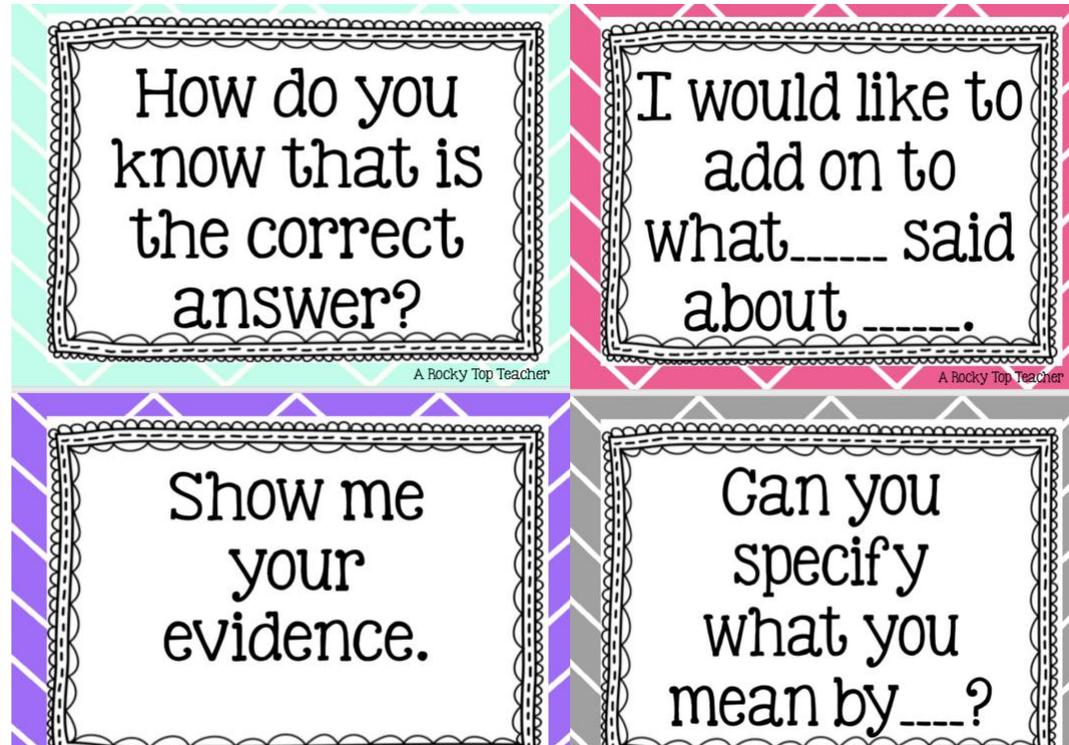
Week 1: Mathematical Practice and Accountable Talk

Refer to [pages 9-12](#) for the Eight Standards for Mathematical Practice.

Posters for the 8 standards to print and hang in your classroom can be found [here](#). You may have to scroll a little before you see them.

There are a lot of fantastic resources on the site above to help you understand, explain, and teach the 8 practices!

Free Accountable Talk posters to print and hang in your classroom can be found [here](#).



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 ([Common Core 8](#))



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Weeks 2-3: Addition		
<p>3.NBT.A.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>3.OA.D.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. <i>For example, analyze patterns in the multiplication table and observe that 4 times a number is always even (because $4 \times 6 = (2 \times 2) \times 6 = 2 \times (2 \times 6)$), which uses the associative property of multiplication</i></p>	<p>Learning Targets I can add within 1000 with ease using various place value strategies and properties.</p> <p>I can identify and describe arithmetic patterns in number charts, addition tables, and multiplication tables.</p> <p>Essential Understandings:</p> <ol style="list-style-type: none"> 1. Addition can be used to solve real world problems that involve joining, part-part whole or comparison. 2. There are properties that are used to govern arithmetic and algebra that are always true. 3. Relationships can be described and generalizations made for mathematical situations that have numbers or objects that repeat in predictable ways. 4. Sometimes the answer to one problem/question is needed to find the answer to another problem/question. 5. Answers to problems should always be checked for reasonableness, and this can be done in different ways. <p>Essential Questions:</p> <ol style="list-style-type: none"> 1. How can addition properties be used to show relationships that always hold true? 2. How can you use place value to add 3-digit numbers? 3. How can you break apart numbers to help you add 2 digit numbers using mental math? 4. How can we use estimation and rounding to check to see if our answers are reasonable? 	<p>GO! Math 1-1 Number Patterns 1-5 Use Properties to Add 1-6 Use the Break Apart Strategy to Add 1-7 Use Place Value to Add</p> <p>- EngageNY Module 2, Topic D has additional lessons on addition</p> <p>Vocabulary: addition, add, addend, sum, strategies, properties</p> <p>Mathematical Practices Focus 6. Attend to precision.</p> <p>Additional Resources: Mall Mania by Stuart J. Murphy BrainpopJr: Adding with Regrouping</p> <p>Math Instructional Focus Document https://www.tn.gov/content/dam/tn/education/standards/math/Standards_Support_grade_3_Mathematics.pdf Ensure that instruction meets the rigor called for by the standard. To help with this, use the Instructional Focus Documents (Use the dropdown to choose what grade-level) and the Go Math Guidance Documents</p>
Teacher Created Formative Assessment		



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Weeks 4-5: Subtraction		
<p>3.NBT.A.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>	<p>Learning Targets I can subtract within 1000 with ease using various place value strategies and properties.</p> <p>Essential Understandings:</p> <ol style="list-style-type: none"> 1. Some real-world problems involving joining, separating, part-part-whole, or comparison can be solved using subtraction. 2. There is more than one way to do a mental calculation. 3. Place value relationships can help to simplify mathematical operations and equations. 4. Estimation strategies include front end estimation, rounding with adjustments, and using benchmark numbers. These strategies can be used to check for reasonableness. <p>Essential Questions:</p> <ol style="list-style-type: none"> 1. When do we subtract? 2. How can you subtract using mental math? 3. How can you use place value to subtract 3-digit numbers? 	<p>GO! Math 1-9 Mental Math Strategies for Subtraction 1-10 Use Place Value to Subtract 1-11 Combine Place Values to Subtract</p> <p>EngageNY Module 2, Topic E has additional lessons on subtraction</p> <p>Vocabulary: subtraction, subtract, difference, strategies</p> <p>Mathematical Practices Focus 6. Attend to precision.</p> <p>Math Task Suggestions: Instructional and Assessment Tasks: http://www.edutoolbox.org/tntools</p> <p>Additional Resources: Shark Swimathon by Stuart J. Murphy BrainpopJr: Subtracting without Regrouping, Subtracting with Regrouping</p> <p>Math Instructional Focus Document https://www.tn.gov/content/dam/tn/education/standards/math/Standards_Support_grade_3_Mathematics.pdf</p>
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Week 6: Rounding and Estimating		
<p>3.NBT.A.1 Round whole numbers to the nearest 10 or 100 using understanding of place value.</p>	<p>Learning Targets I can determine the midway point between multiples of ten or hundred in order to round conceptually. I can use place value to round to the nearest 10 by reasoning about position of the number in relation to the midpoint. I can use place value to round to the nearest 100 by reasoning about position of the number in relation to the midpoint.</p> <p>Essential Understandings: 1. Numbers are rounded to the nearest ten or hundred by determining which it is closer to on a number line. 2. When reasoning about the closest ten or hundred on a number line, you must be able to identify the midpoint.</p> <p>Essential Questions:</p> <ol style="list-style-type: none"> How can you round numbers? How can you use compatible numbers and rounding to estimate sums? How can you use compatible numbers and rounding to estimate differences? 	<p>GO! Math 1.2 Round to the Nearest Ten or Hundred 1.3 Estimate Sums 1.8 Estimate Differences</p> <p>EngageNY Module 2, Topic C has additional lessons on rounding</p> <p>Vocabulary: place value, round, estimate</p> <p>Mathematical Practices Focus 6. Attend to precision.</p> <p>Accountable Talk Stems:</p> <ul style="list-style-type: none"> □ Did everyone hear that? □ Can someone repeat what was just said? □ Can someone add on to what was said? □ Does someone have a similar idea? □ Do you agree or disagree? <p>Additional Resources: Rounding Numbers PDF Rounding Numbers Song BrainpopJr: Place Value, Rounding</p> <p>Math Instructional Focus Document https://www.tn.gov/content/dam/tn/education/standards/math/Standards_Support_grade_3_Mathematics.pdf</p>
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Weeks 7-8: Multiplication Strategies and Word Problems		
<p>3.OA.A.1 Interpret the factors and products in whole number multiplication equations, (e.g., 4×7 is 4 groups of 7 objects with a total of 28 objects or 4 strings measuring 7 inches each with a total of 28 inches.) *Area, in the form of arrays, can (and should) go ahead and be introduced along with this standard!</p> <p>3.OA.A.3 Multiply within 100 to solve contextual problems, with unknowns in all positions, in situations involving equal groups, arrays, and measurement quantities using strategies based on place value, the properties of operations, and the relationship between multiplication and division (e.g., contexts including computations such as $3 \times ? = 24$, $6 \times 16 = ?$, $? \div 8 = 3$, or $96 \div 6 = ?$)</p>	<p>Learning Targets I can interpret the factors and products in whole number multiplication equations. ($50 = 5 \times 10$ can be interpreted as 5 groups of 10, an array with 5 rows and 10 columns, the area of a 5-by-10 rectangle, a number line with 5 groups of 10, or repeated addition $10+10+10+10+10$).</p> <p>I can determine when to multiply in word problems by focusing on equal groups and arrays/area with unknown products. I can represent multiplication situations with concrete models. I can determine the total number of groups and items in each group I can make connections between concrete models and equations/expressions.</p> <p>Enduring Understandings:</p> <ol style="list-style-type: none"> Some real-world problems involve joining or separating equal groups. Repeated addition represents/is joining equal groups and is one way to think about multiplication. An array represents/is joining equal groups and is one way to think about multiplication. A number line can represent joining equal groups and is one way to think about multiplication. Area can represent joining equal groups and is one way to think about multiplication. 	<p>GO! Math 3-1 Count Equal Groups 3-2 Relate Addition and Multiplication 3-3 Skip Count on a Number Line 3-5 Model with Arrays</p> <p>Vocabulary: multiplication, multiply, factors, products, arrays, equal groups, groups of, twice, commutative property</p> <p>Mathematical Practices Focus</p> <ol style="list-style-type: none"> Make sense of problems and persevere in solving them. Reason abstractly and quantitatively. Look for and make use of structure. <p>Math Task Suggestions: Instructional and Assessment Tasks: http://www.edutoolbox.org/tntools</p> <p>Accountable Talk Stems:</p> <ul style="list-style-type: none"> □ Did everyone hear that? □ Can someone repeat what was just said? □ Can someone add on to what was said? □ Does someone have a similar idea? □ Do you agree or disagree? <p>Additional Resources:</p>

Third



Grade Mathematics Curriculum Map 1st Nine Weeks 2020-2021

	<p>Essential Questions:</p> <ol style="list-style-type: none">1. How can you find the total number of objects in equal groups?2. What are arrays, and how do they show multiplication?3. How can you write a story to describe a multiplication fact?4. How do you write a good mathematical explanation?5. Can you use an array to solve multiplication problems?6. How is multiplication like addition?	<p>See Multiplication and Division Situations Chart (scroll to the bottom)</p> <p>Amanda Bean's Amazing Dream by Cindy Neuschwander</p> <p>Too Many Kangaroo Things to Do by Great Source Mathstart</p> <p>BrainpopJr: Arrays, Repeated Addition</p> <p>Math Instructional Focus Document</p> <p>https://www.tn.gov/content/dam/tn/education/standards/math/Standards_Support_grade_3_Mathematics.pdf</p>
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Week 9: Connect Multiplication (Arrays) with Area		
<p>3.MD.C.5 Recognize that plane figures have an area and understand concepts of area measurement.</p> <p>a. Understand that a square with side length 1 unit, called "a unit square," is said to have "one square unit" of area and can be used to measure area.</p> <p>b. Understand that a plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units</p> <p>3.MD.C.6 Measure areas by counting unit squares (square centimeters, square meters, square inches, square feet, and improvised units).</p> <p>3.MD.C.7 Relate area of rectangles to the operations of multiplication and addition.</p> <p>a. Find the area of a rectangle with whole-number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths.</p> <p>b. Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real-world and mathematical problems and represent whole-number products as rectangular areas in mathematical reasoning.</p>	<p>Learning Targets</p> <p>I can measure area with square units.</p> <p>I can use square units to show the area of plane figures.</p> <p>I can find an area by counting square units.</p> <p>I can find an area by tiling, and also prove that it is the same as multiplying the side lengths.</p> <p>I can solve and reason through real-world problems that require finding the area of rectangles with whole number lengths.</p> <p>Enduring Understandings:</p> <ol style="list-style-type: none"> The region inside a shape is its area and can be measured using square units. Area of rectangles can be found by adding the individual square units. A rectangle can be decomposed into an array, therefore area can be found by multiplying side lengths. <p>Essential Questions:</p> <p>What is area and how do you measure it? How can you find the area of a plane figure? Why can you multiply to find the area of a rectangle?</p>	<p>GO! Math</p> <p>11-4 Understand Area 11-5 Measure Area 11-6 Use Area Models</p> <p>Vocabulary: attribute, area, square unit, unit square, plan figure, gap, overlap, square cm, square m, square in, square ft, nonstandard units, tiling, side length,</p> <p>Mathematical Practices Focus</p> <p>4. Model with mathematics.</p> <p>Math Task Suggestions: Instructional and Assessment Tasks: http://www.edutoolbox.org/tntools</p> <p>Accountable Talk Stems:</p> <ul style="list-style-type: none"> □ Did everyone hear that? □ Can someone repeat what was just said? □ Can someone add on to what was said? □ Does someone have a similar idea? □ Do you agree or disagree? <p>Additional Resources: BrainpopJr: Area Math Instructional Focus Document https://www.tn.gov/content/dam/tn/education/standards/math/Standards_Support_grade_3_Mathematics.pdf</p>
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