

| Pacing | Standards of Learning | "I Can" Statements |
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| <p>HME Unit and Big Ideas <u>Fluency Plan:</u> -Basic Addition and Subtraction Strategies - Patterns in Multiplication and Division - Fluency with Basic Multiplication and Division</p> <p>Recommended Lessons All (FP-1 through FP-17) <i>As needed.</i></p> <p>VDOE ESS Number Ray Investigators (SOL 4.5a), Factor Frenzy (SOL 4.5a), Multiple Madness (SOL 4.5a), Finding Factors, Making Multiples (SOL 4.5a), and What's It Worth (SOL 4.16ab)</p> <p>Lesson 1-8 (Factors and Prime Numbers); Gr 5 Lesson 5-13, Going Further (Factors and Multiples)</p> <p>Approximate Timeframe</p> | <p>4.4b Multiply whole numbers (basic facts through 12's)</p> <p>4.4c Divide whole numbers (basic facts through 12's)</p> <p>4.5a Determine common multiples and factors, including least common multiple and greatest common factor</p> <p>4.15 Recognize, create, and extend numerical patterns (\times, \div) using tables, symbols, and words</p> | <p>4.4b</p> <ul style="list-style-type: none"> ● I can identify and use the vocabulary words sum, difference, and product. ● I can model a multiplication problem with base-10 blocks, manipulatives, or drawings. ● I can multiply whole numbers. <ul style="list-style-type: none"> ○ I can use basic facts to multiply. ○ I can recognize all of the multiplication symbols. ○ I can use area models to multiply. ○ I can model and solve a multiplication problem using an area model. <p>4.4c</p> <ul style="list-style-type: none"> ● I can model a division problem with base-10 blocks, manipulatives, or drawings. ● I can identify and use the vocabulary word quotient. ● I can divide whole numbers. <ul style="list-style-type: none"> ○ I can use basic facts to divide. ○ I can recognize all of the division symbols. <p>4.5a</p> <ul style="list-style-type: none"> ● I can find common multiples of numbers. ● I can determine the least common multiple of numbers. ● I can find common factors of numbers. ● I can determine the greatest common factor of numbers. <p>4.15</p> <ul style="list-style-type: none"> ● I can recognize whether a pattern is increasing or decreasing. <ul style="list-style-type: none"> ○ I can identify an increasing or decreasing pattern where the rule repeats. ○ I can identify an increasing or decreasing pattern where the rule changes. ● I can describe numerical patterns. <ul style="list-style-type: none"> ○ I can describe numerical patterns in a table. (table, chart, Input-Output, function machines) ○ I can describe numerical patterns with symbols. ● I can create numerical patterns with words. <ul style="list-style-type: none"> ○ I can use materials to create a numerical pattern. ○ I can use number lines to create a numerical pattern. ○ I can use tables (table, chart, Input-Output, function machines) to create a numerical pattern. ○ I can use words to create a numerical pattern. ● I can predict what comes next in a given pattern (geometric or numerical). <ul style="list-style-type: none"> ○ I can determine the rule of an increasing or decreasing pattern. ○ I can determine the rule given an input or output. ● I can continue a given pattern (geometric or numerical). |

SOL 4.9 Note: Although elapsed time is not benchmarked until the Third Nine Weeks, introduce this topic during the First Nine Weeks so that you can use examples from your daily schedule to help students develop this skill throughout the school year.

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| <p>5 days</p> <p>End of Unit Assessment 1 day</p> | <p>4.15 Recognize, create, and extend numerical patterns (+, -, x, ÷) using tables, symbols, and words</p> | <ul style="list-style-type: none"> ○ I can label the other axis with categories related to the title of the graph. ○ I can title the bar graph. ● I can identify the title or axes in a given graph. ● I can identify the increments on each axis. <ul style="list-style-type: none"> ○ I can identify any points between the labeled increments. ● I can interpret and describe data displayed in a bar graph. <ul style="list-style-type: none"> ○ I can identify the category with the greatest/least amount. ○ I can identify categories with the same number of responses. ○ I can identify similarities and differences within the data. ○ I can find the total number of responses. ● I can write to describe my interpretation of the data, including any special characteristics. ● I can use a calculator to interpret data displayed in a graph. <p>4.15</p> <ul style="list-style-type: none"> ● I can recognize whether a pattern is increasing or decreasing. <ul style="list-style-type: none"> ○ I can identify an increasing or decreasing pattern where the rule repeats. ○ I can identify an increasing or decreasing pattern where the rule changes. ● I can describe numerical patterns. <ul style="list-style-type: none"> ○ I can describe numerical patterns in a table. (table, chart, Input-Output, function machines) ○ I can describe numerical patterns with symbols. ● I can create numerical patterns with words. <ul style="list-style-type: none"> ○ I can use materials to create a numerical pattern. ○ I can use number lines to create a numerical pattern. ○ I can use tables (table, chart, Input-Output, function machines) to create a numerical pattern. ○ I can use words to create a numerical pattern. ● I can predict what comes next in a given pattern (geometric or numerical). <ul style="list-style-type: none"> ○ I can determine the rule of an increasing or decreasing pattern. ○ I can determine the rule given an input or output. ● I can continue a given pattern (geometric or numerical). <ul style="list-style-type: none"> ○ I can use the rule to extend the pattern beyond the next step. ● I can use a calculator to extend numerical patterns. |
| <p>HME Unit and Big Ideas <u>Unit 3:</u> - Addition and Subtraction Problems - Place Value to Millions - Addition to Millions</p> | <p>4.1a Identify the place value for each digit in a whole number expressed through millions</p> | <p>4.1a</p> <ul style="list-style-type: none"> ● I can read whole numbers through the one millions place. <ul style="list-style-type: none"> ○ I can read a whole number in standard form. ○ I can match word form and standard form. ● I can write whole numbers expressed through millions. <ul style="list-style-type: none"> ○ I can write a whole number in standard form. ○ I can write a whole number in expanded form. ○ I can write a whole number in word form. |

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| <p>- Subtraction to Millions</p> <p>Recommended Lessons All (3-1 through 3-21)</p> <p>Approximate Timeframe 20 days</p> <p>End of Unit Assessment 1 day</p> | <p>4.1b Compare two whole #'s expressed through millions (<, >, =)</p> <p>4.1c Round whole numbers (through millions) to the nearest thousand, ten thousand, & hundred thousand</p> <p>4.4a Estimate sums and differences of whole numbers</p> <p>4.4b Add and subtract whole numbers</p> | <ul style="list-style-type: none"> ● I can identify the place and value of each digit through the one millions place. <ul style="list-style-type: none"> ○ I can identify the place and value in standard form. ○ I can identify the place and value when a number is in expanded form. ○ I can identify the place and value of a whole number in a place value drawing or model. ● I can model a whole number using manipulatives or drawings. <p>4.1b</p> <ul style="list-style-type: none"> ● I can compare two whole numbers expressed through the one millions place. <ul style="list-style-type: none"> ○ I can compare numbers using symbols. <ul style="list-style-type: none"> ■ I can explain what <, >, and = mean. ■ I can use the symbols for greater than, less than, and equal to. ○ I can compare numbers using words. ○ I can explain why numbers are greater or less than other numbers using place value. ○ I can create a comparison statement using numbers. <p>4.1c</p> <ul style="list-style-type: none"> ● I can round whole numbers to a given place value. ● I can use rounding to solve addition and subtraction problems with mental math. <ul style="list-style-type: none"> ○ I can tell when rounding is useful. ○ I can check my work using rounding to make sure my answer makes sense. <p>4.4a</p> <ul style="list-style-type: none"> ● I can estimate sums of whole numbers. ● I can estimate differences of whole numbers. ● I can estimate products of whole numbers. ● I can estimate quotients of whole numbers. ● I can use phrases (closer to, between, a little more than) to describe my estimation. <ul style="list-style-type: none"> ○ I can say if my estimation is closer to, between, or a little more than a number. ● I can estimate before solving to see if my answer is reasonable. ● I can check to see if my answer is reasonable. <p>4.4b</p> <ul style="list-style-type: none"> ● I can identify and use the vocabulary words sum, difference, and product. ● I can add whole numbers. ● I can subtract whole numbers. ● I can model a multiplication problem with base-10 blocks, manipulatives, or drawings. ● I can multiply whole numbers. <ul style="list-style-type: none"> ○ I can use basic facts to multiply. ○ I can recognize all of the multiplication symbols. ○ I can use area models to multiply. |
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| | <p>4.4d Solve single-step and multistep addition and subtraction problems with whole numbers</p> | <ul style="list-style-type: none">○ I can model and solve a multiplication problem using an area model.○ I can use the traditional algorithm to multiply.○ I can explain how the area model relates to the traditional algorithm. <p>4.4d</p> <p>I can solve single-step problems.</p> <ul style="list-style-type: none">○ I can use addition to solve single-step problems.○ I can use subtraction to solve single-step problems.○ I can use multiplication to solve single-step problems. <ul style="list-style-type: none">● I can solve multi-step problems.<ul style="list-style-type: none">○ I can explain the process of solving multi-step problems.○ I can use multiple representations to solve problems.<ul style="list-style-type: none">■ I can make a drawing to solve a word problem.■ I can verbally explain how to solve a word problem. |
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