# Math Curriculum Map and Pacing Guide – Grade 4

| Pacing | Topics | envision Math Topics | Pages | NY CCLS | Modules | Common Core Modules | Supplemental Materials |
|---|---|---|---|---|---|---|---|
| 1 Day | 1 | Topic 1-1 Meanings of Multiplication | 6-9 | 4.OA.1 | **Module 3:** Multi-Digit Multiplication and Division **Module 7:** Exploring Multiplication | **4.OA.1** Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 x 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations | |
| 1 Day | 1 | Topic 1-2 Pattern for Facts | 10-11 | 4.OA.5 | **Module 5:** Fraction Equivalence, Ordering, and Operations | **4.OA.5** Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way | |

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|---|---|---|---|---|---|---|---|
| 1 Day | 1 | Topic 1-3 Multiplication Properties | 12-13 | 4.OA.1 | **Module 3:** Multi-Digit Multiplication and Division<br><br>**Module 7:** Exploring Multiplication | **4.OA.1** Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 x 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations | |
| 1 Day | 1 | Topic 1-4 3,4,6,7, and 8 as Factors | 14-17 | | | | |
| 1 Day | 1 | Topic 1-5 Problem Solving: Look for a Pattern | 18-19 | 4.OA.3 | **Module 1:** Place Value, Rounding, and Algorithms for Addition and Subtraction<br><br>**Module 3:** Multi-Digit Multiplication and Division | **4.OA.3** Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies | Do pages 18-19 together. |

| | | | | | Module 7:<br>Exploring Multiplication | including rounding. | |
|---|---|---|---|---|---|---|---|
| 1 Day | 1 | Topic 1-6<br>Meanings of Division | 20-23 | 4.OA.2 | Module 3:<br>Multi-Digit Multiplication and Division<br><br>Module 7:<br>Exploring Multiplication | 4.OA.2<br>Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison | |
| 1 Day | 1 | Topic 1-7<br>Relating Multiplication and Division | 24-25 | 4.OA.1 | Module 3:<br>Multi-Digit Multiplication and Division<br><br>Module 7:<br>Exploring Multiplication | 4.OA.1<br>Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 x 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations | |
| 1 Day | 1 | Topic 1-8<br>Special Quotients | 26-27 | 4.OA.2 | Module 3:<br>Multi-Digit Multiplication and Division | 4.OA.2<br>Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a | |

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| | | | | | *Module 7:* Exploring Multiplication | symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison | |
| 1 Day | 1 | Topic 1-9 Using Multiplication Facts to Find Division Facts | 28-29 | 4.OA.2 | *Module 3:* Multi-Digit Multiplication and Division<br><br>*Module 7:* Exploring Multiplication | *4.OA.2* Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison | |
| Optional | 1 | Topic 1-10 Problem Solving: Draw a Picture and Write an Equation | 30 -31 | 4.OA.2 | *Module 3:* Multi-Digit Multiplication and Division<br><br>*Module 7:* Exploring Multiplication | *4.OA.2* Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison | Other multi-step word problem activities. *Do pages 30 and 31 together. |
| Homework | | Topic 1 Pre-Test | 34-35 | | | | |

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| 1 Day | 1 | Correct together:<br>Topic 1 Pre-Test<br><br>TOPIC 1     TEST | 34-35 | | | | *Assign Test as<br>Individual Work<br><br>*Test Masters |
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| | | **\*Recommendation -** | Assign | Daily Common Core | As | Independent Practice | |
| 1 Day | 2 | Topic 2-1<br>Repeating Patterns | 40-41 | 4.OA.5 | *Module 5:* Fraction Equivalence, Ordering, and Operations | *4.OA.5*<br>Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way. | |
| 1 Day | 2 | Topic 2-2<br>Number Sequences | 42-43 | 4.OA.5 | *Module 5*: Fraction Equiva ence, Ordering, | *4.OA.5*<br>Generate a number or shape pattern that follows a given rule. Identify apparent features of the | |

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| | | | | | and Opera tions | pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way. | |
| 1 Day | 2 | Topic 2-3 Extending Tables | 44-45 | 4.OA.5 | *Module 5:* Fraction Equiva lence, Ordering, and Opera tions | *4.OA.5* Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way. | |

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|---|---|---|---|---|---|---|---|
| 1 Day | 2 | Topic 2-4<br>Writing Rules for Situations | 46-49 | 4.OA.5 | *Module 5:* Fraction Equivalence, Ordering, and Operations | *4.OA.5* Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way. | |
| Optional / include with other lessons | 2 | Topic 2-5<br>Geometric Patterns | 50-53 | 4.OA.5 | *Module 5:* Fraction Equivalence, Ordering, and Operations | *4.OA.5* Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate | |

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| | | | | | | between odd and even numbers. Explain informally why the numbers will continue to alternate in this way. | |
| 1 Day | 2 | Topic 2-6 Problem Solving: Act it Out and Use Reasoning | 54-57 | 4.OA.5 | **Module 5**: Fraction Equivalence, Ordering, and Operations | **4.OA.5** Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way. | Other multi-step word problems. *Do pages 54-57 together. |
| Homework | 2 | Topic 2 Pre-Test | 60-61 | | | | |
| 1 Day | 2 | Correct together: Topic 2 Pre-Test TOPIC 2 TEST | 60-61 | | | | *Assign Topic Test as Individual work. *Test Masters |

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| | | *Recommendation - | Assign | Daily Common Core | As | Independent Practice | |
|---|---|---|---|---|---|---|---|
| 1 Day | 3 | Topic 3-1 Representing Numbers<br><br>*Focus on PLACE | 66-67 | 4.NBT.2 | *Module 1:* Place Value, Rounding, and Algorithms for Addition and Subtraction | *4.NBT.2* Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons | |
| 1 Day | 3 | Topic 3-1 Representing Numbers<br><br>*Focus on VALUE | 66-67 | 4.NBT.2 | *Module 1:* Place Value, Rounding, and Algorithms for Addition and Subtraction | *4.NBT.2* Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons | |
| 1 Day | 3 | Topic 3-1 Representing Numbers *Focus on Standard, Expanded and Word Form | 66-67 | 4.NBT.2 | *Module 1:* Place Value, Rounding, and | *4.NBT.2* Read and write multi-digit whole numbers using base-ten numerals, number names, and | |

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| | | | | | Algorithms for Addition and Subtraction | expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons | |
| OMIT, but put in Topic 4 | 3 | Topic 3-2 Place Value Relationships | 68-69 | 4.NBT.2 | *Module 1:* Place Value, Rounding, and Algorithms for Addition and Subtraction | *4.NBT.2* Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons | |
| 1 or  2 Days | 3 | Topic 3-3 Comparing Numbers | 70-73 | 4.NBT.2 | *Module 1:* Place Value, Rounding, and Algorithms for Addition and Subtraction | *4.NBT.2* Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons | |

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|---|---|---|---|---|---|---|---|
| 1 Day | 3 | Topic 3-4 Ordering Numbers | 74-77 | 4.NBT.2 | *Module 1:* Place Value, Rounding, and Algorithms for Addition and Subtraction | *4.NBT.2* Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons | |
| 1 to 2 Days | 3 | Topic 3-5 Rounding Whole Numbers | 78-79 | 4.NBT.2 | *Module 1:* Place Value, Rounding, and Algorithms for Addition and Subtraction | *4.NBT.2* Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons | |
| OMIT, but put in Topic 4 | 3 | Topic 3-6 Problem Solving: Make an Organized List | 80-81 | 4.NBT.2 | *Module 1:* Place Value, Rounding, and Algorithms for Addition and | *4.NBT.2* Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using | |

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| | | | | | Subtraction | >, =, and < symbols to record the results of comparisons | |
|---|---|---|---|---|---|---|---|
| Homework | 3 | Topic 3 Pre-Test | 84-85 | | | | |
| 1 Day | 3 | Correct together: Topic 3 Pre-test .TOPIC 3 TEST | 84-85 | | | | *Assign Topic Test as Individual Work. *Test Masters |
| | | **\*Recommendation -** | Assign | Daily Common Core | As | Independent Practice | |
| Skip/Optional | 4 | Topic 4-1 Using Mental Math to Add and Subtract | 90- 93 | 4.NBT.3 4.OA.3 | *Module 1* Place Value, Rounding, and Algorithms for Addition and Subtraction | *4.NBT.3* Use place value understanding to round multi-digit whole numbers to any place. *4.OA.3* Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent | |

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| | | | | | | these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. | |
| 1 Day | 3 | Topic 3-2 Place Value Relationships | 68-69 | 4.NBT.2 | *Module 1:* Place Value, Rounding, and Algorithms for Addition and Subtraction | **4.NBT.2** Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons | |
| 1 Day | 3 | Topic 3-6 Problem Solving: Make an Organized List | 80-81 | 4.NBT.2 | *Module 1:* Place Value, Rounding, and Algorithms for Addition and Subtraction | **4.NBT.2** Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons | *Do pages 80 and 81 together. |

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| 1 Day | 4 | Topic 4-2<br>Estimating Sums and Differences of Whole Numbers | 94-95 | 4.NBT.3<br>4.NBT.4<br>4.OA.3 | *Module 1:* Place Value, Rounding, and Algorithms for Addition and Subtraction | **4.NBT.3** Use place value understanding to round multi-digit whole numbers to any place. Use place value understanding and properties of operations to perform multi-digit arithmetic.<br>**4.NBT.4** Fluently add and subtract multi-digit whole numbers using the standard algorithm.<br>Use the four operations with whole numbers to solve problems.<br>**4.OA.3** Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation | |

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| | | | | | | and estimation strategies including rounding. | |
| 1 Day | 4 | Topic 4-3 Adding Whole Numbers | 96-99 | 4.NBT.4 | *Module 1:* Place Value, Rounding, and Algor ithms for Addition and Subtrac tion | *4.NBT.4* Fluently add and subtract multi-digit whole numbers using the standard algorithm. Use the four operations with whole numbers to solve problems. | |
| 1 Day | 4 | Topic 4-4 Subtracting Whole Numbers | 100-101 | 4.NBT.4 | *Module 1:* Place Value, Rounding, and Algor ithms for Addition and Subtrac tion | *4.NBT.4* Fluently add and subtract multi-digit whole numbers using the standard algorithm. Use the four operations with whole numbers to solve problems. | |
| 1 – 2 Days | 4 | Topic 4-5 Subtracting Across Zeros | 102-103 | 4.NBT.4 | *Module 1:* Place Value, Rounding, and Algor ihms for Addition and | *4.NBT.4* Fluently add and subtract multi-digit whole numbers using the standard algorithm. Use the four operations with whole numbers to solve problems. | *An extra day may be necessary to practice subtraction and borrowing. |

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| | | | | | Subtraction | | |
|---|---|---|---|---|---|---|---|
| 1 Day | 4 | Topic 4-6 Problem Solving: Draw a Picture and Write an Equation | 104-107 | 4.NBT.4 | **Module 1:** Place Value, Rounding, and Algorithms for Addition and Subtraction | **4.NBT.4** Fluently add and subtract multi-digit whole numbers using the standard algorithm. Use the four operations with whole numbers to solve problems. | *Do pages 104-107 together. *Focus on Equations. |
| Homework | 4 | Topic 4 Pre-Test | 110-111 | | | | |
| 1 Day | 4 | Correct together: Topic 4 Pre-Test TOPIC 4 TEST | 110-111 | | | | *Assign Topic Test as individual work. *Test Masters |
| | | **\*Recommendation -** | Assign | Daily Common Core | As | Independent Practice | |

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| | | | | | Module 3: | 4.NBT.5 | |
|---|---|---|---|---|---|---|---|
| 1 Day | 5 | Topic 5-1 Arrays and Multiplying by 10 and 100. | 116-117 | 4.NBT.5 | Multi-Digit Multiplicati on and Division | Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | Show arrays to develop a visual understanding of the meaning of multiplication. |
| | | Topic 5-2 Multiplying by Multiples of 10 and 100 | 118-119 | 4.NBT.5 | | | |
| 1 Day | 5 | Topic 5-3 Breaking Apart to Multiply | 120-121 | 4.NBT.5 | Module 3: Multi-Digit Multiplicati on and Division | 4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |
| SKIP | 5 | Topic 5-4 Using Mental Math to Multiply | 122-123 | 4.NBT.5 | Module 3: Multi-Digit Multiplicati on and Division | 4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place | |

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| | | | | | value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |
| 1 Day | 5 | Topic 5-5 Using Rounding to Estimate | 124-125 | 4.NBT.5 | *Module 3:* Multi-Digit Multiplication and Division | *4.NBT.5* Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |
| 1 Day | 5 | Topic 5-6 Problem Solving | 126-129 | 4.NBT.5 | *Module 3:* Multi-Digit Multiplication and Division | *4.NBT.5* Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |

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| Homework | 5 | Topic 5 Pre-Test | 132-133 | | | | |
| 1 Day | 5 | Correct together: Topic 5 Pre-Test<br><br>TOPIC 5 TEST | | | | | *Assign Topic Test as individual work.<br><br>*Test Masters |
| | | **\*Recommendation -** | Assign | Daily Common Core | As | Independent Practice | |
| 1 Day | 6 | Topic 6-1<br>Arrays and Using an Expanded Algorithm | 138-141 | 4.NBT.5 | *Module 3:* Multi-Digit Multiplication and Division | *4.NBT.5*<br>Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |
| 1 Day | 6 | Topic 6-2<br>Connecting the Expanded and Standard Algorithms | 142-143 | 4.NBT.5 | *Module 3:* Multi-Digit Multiplication and Division | *4.NBT.5*<br>Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two- | |

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| | | | | | | digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |
| 1 Day | 6 | Topic 6-3 Multiplying 2-Digit by 1-Digit Numbers | 144-147 | 4.NBT.5 | *Module 3:* Multi-Digit Multiplication and Division | *4.NBT.5* Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |
| 1 Day | 6 | Topic 6-4 Multiplying 3-and 4-Digit by 1-Digit Numbers | 148-151 | 4.NBT.5 | *Module 3:* Multi-Digit Multiplication and Division | *4.NBT.5* Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or | |

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| | | | | | area models. | |
| SKIP | 6 | Topic 6-5 Multiplying by 1-Digit | 152-153 | 4.NBT.5 | **Module 3:** Multi-Digit Multiplication and Division | **4.NBT.5** Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |
| SKIP | 6 | Topic 6-6 Problem Solving: Missing or Extra Information | 154-157 | 4.NBT.5 | **Module 3:** Multi-Digit Multiplication and Division | **4.NBT.5** Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |

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| Homework | 6 | Topic 6 Pre-Test | 160-161 | | | |
| 1 Day | 6 | Correct together: Topic 6 Pre-Test<br><br>TOPIC 6 TEST | | | | *Assign Topic Test as individual work.<br><br>*Test Masters |
| | | **\*Recommendation -** | Assign | Daily Common Core | As | Independent Practice | |
| 1 Day | 7 | Topic 7-1<br>Arrays and Multiplying 2-Digit Numbers by Multiples of 10 | 166-169 | 4.NBT.5 | *Module 3:* Multi-Digit Multiplication and Division | *4.NBT.5* Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |
| 1 Day | 7 | Topic 7-2<br>Using Mental Math to Multiply 2-Digit Numbers | 170-171 | 4.NBT.5 | *Module 3:* Multi-Digit Multiplication and | *4.NBT.5* Multiply a whole number of up to four digits by a one-digit whole number, | |

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| | | | | | Division | and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |
| 1 Day | 7 | Topic 7-3 Using Rounding to Estimate | 172-173 | 4.NBT.5 | *Module 3:* Multi-Digit Multiplication and Division | **4.NBT.5** Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |
| SKIP | 7 | Topic 7-4 Using Compatible Numbers to Estimate | 174-175 | 4.NBT.5 | *Module 3:* Multi-Digit Multiplication and Division | **4.NBT.5** Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, | |

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| | | | | | rectangular arrays, and/or area models. | |
| 1 Day | 7 | Topic 7-5 Problem Solving: Multiple-Step Problems | 176-177 | 4.NBT.5 | *Module 3:* Multi-Digit Multiplication and Division | *4.NBT.5* Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | Do pages 176 and 177 together. |
| Homework | 7 | Topic 7 Pre-Test | 180-181 | | | | |
| 1 Day | 7 | Correct together: Topic 7 Pre-Test  TOPIC 7 TEST | | | | | *Assign Topic Test as individual work.  *Test Masters |
| 2 Days | 8 | Topic 8-1 Arrays and Multiplying 2-Digit Numbers | 186-189 | 4.NBT.5 | *Module 3:* Multi-Digit Multiplication and Division | *4.NBT.5* Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using | |

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| | | | | | | strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |
| 1 Day | 8 | Topic 8-2 Arrays and an Expanded | 190-191 | 4.NBT.5 | *Module 3:* Multi-Digit Multiplication and Division | *4.NBT.5* Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |
| 1 Day | 8 | Topic 8-3 Multiplying 2-Digit Numbers by Multiples of 10 | 192-193 | 4.NBT.5 | *Module 3*: Multi-Digit Multiplication and Division | *4.NBT.5* Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |

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| | | | | | Module 3: Multi-Digit Multiplication and Division | 4.NBT.5 | |
|---|---|---|---|---|---|---|---|
| 3 Days | 8 | Topic 8-4<br>Multiplying 2-Digit by 2-Digit Numbers | 194-195 | 4.NBT.5 | Module 3: Multi-Digit Multiplicati on and Division | 4.NBT.5<br>Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |
| 1 Day | 8 | Topic 8-5<br>Problem Solving Two Question Problems | 196-197 | 4.NBT.5 | Module 3: Multi-Digit Multiplicati on and Division | 4.NBT.5<br>Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | Do pages 196 – 197 together. |
| Homework | 8 | Topic 8 Pre-Test | 200-201 | | | | |

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| 1 Day | 8 | Correct together: Topic 8 Pre-Test<br><br>TOPIC 8 TEST | | | | | *Assign Topic Test as individual work.<br><br>*Test Masters |
| | | **\*Recommendation -** | Assign | Daily Common Core | As | Independent Practice | |
| 1 Day | 10 | Topic 10-1<br>Using Objects to Divide: Division as Repeated Subtraction | 228-229 | 4.NBT.6 | *Module 3:* Multi-Digit Multiplication and Division | **4.NBT.6**<br>Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models | |
| SKIP | 10 | Topic 10-2<br>Division as Repeated Subtraction | 230-231 | 4.NBT.6 | *Module 3*: Multi-Digit Multiplication and Division | **4.NBT.6**<br>Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship | |

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| | | | | | | between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models | |
| 1 Day | 10 | Topic 10-3 Using Objects to Divide | 232-235 | 4.NBT.6 4.NBT.1 | *Module 3*: Multi-Digit Multiplication and Division<br><br>*Module 1:* Place Value, Rounding, and Algorithms for Addition and Subtraction | **4.NBT.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.<br>**4.NBT.1** Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division. | |

# Math Curriculum Map and Pacing Guide – Grade 4

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|---|---|---|---|---|---|---|---|
| 2 Days | 10 | Topic 10-4 Dividing 2-Digit by 1-Digit Numbers | 236-239 | 4.NBT.6 | **Module 3:** Multi-Digit Multiplication and Division | **4.NBT.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models | Lots of modeling. SuperTeacher worksheets. |
| 2 Days | 10 | Topic 10-5 Dividing 3-Digit by 1-Digit Numbers | 240-241 | 4.NBT.6 | **Module 3:** Multi-Digit Multiplication and Division | **4.NBT.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models | Lots of modeling. CommonCore sheets. |

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|---|---|---|---|---|---|---|---|
| 1 Day | 10 | Topic 10-6 Deciding where to Start Dividing | 242-243 | 4.NBT.6 | **Module 3**: Multi-Digit Multiplication and Division | **4.NBT.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models | |
| 1 Day | 10 | Topic 10-7 Dividing 4-Digit by 1-Digit Numbers | 244-245 | 4.NBT.6 | **Module 3**: Multi-Digit Multiplication and Division | **4.NBT.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models | |

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| 1 Day | 10 | Topic 10-8 Problem Solving: Multiple-Step Problems | 246-247 | 4.OA.3 4.NBT.5 | *Module 1:* Place Value, Rounding, and Algorithms for Addition and Subtraction | *4.OA.3* Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. *4.NBT.5* Multiply a whole number of up to four digits by a one-digit whole number, and multiply two twodigit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | Do pages 246 and 247 together. |
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| HOMEWORK | 10 | Topic 10 Pre-Test | 250-251 | | | |
| 1 Day | 10 | Correct together: Topic 10 Pre-Test<br><br>TOPIC 10 TEST | | | | *Assign Topic Test as individual work.<br><br>*Test Masters |
| | | **\*Recommendation -** | Assign | Daily Common Core | As | Independent Practice | |
| 1 Day | 9 | Topic 9-1<br>Using Mental Math to Divide | 206-207 | 4.NBT.6<br>4.OA.3 | *Module 3:* Multi-Digit Multiplication and Division | *4.NBT.6* Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.<br>*4.OA.3* Solve multistep word problems posed with whole numbers and | |

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| | | | | | having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. | |
| 1 Day | 9 | Topic 9-2 Estimating Quotients | 208-209 | 4.NBT.6 4.OA.3 | *Module 3:* Multi-Digit Multiplication and Division | *4.NBT.6* Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. *4.OA.3* Solve multistep word problems posed with | |

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| | | | | | whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. | |
| 1 Day | 9 | Topic 9-3 Estimating Quotients for Greater Dividends | 210-211 | 4.NBT.6 4.OA.3 | *Module 3:* Multi-Digit Multiplica tion and Division | *4.NBT.6* Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. *4.OA.3* Solve multistep word | |

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| | | | | | problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. | |
| 2-3 Days | 9 | Topic 9-4 Dividing with Remainders | 212-213 | 4.NBT.6 | *Module 3:* Multi-Digit Multiplication and Division | *4.NBT.6* Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models | *Put an X in quotient NOT zero. |

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| SKIP/Optional | 9 | Topic 9-5 Multiplication and Division Stories | 214-217 | 4.NBT.6 4.NBT.5 | *Module 3:* Multi-Digit Multiplication and Division | **4.NBT.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.<br><br>**4.NBT.5** Multiply a whole number of up to four digits by a one-digit whole number, and multiply two twodigit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | |
| 1 Day | 9 | Topic 9-6 Problem Solving: Draw a Picture and Write an Equation | 218-219 | 4.NBT.6 4.OA.2 4.OA.3 | *Module 3:* Multi-Digit Multiplication and Division | **4.NBT.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit | Do pages 218 and 219 together. |

| | | | | | | divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.<br>***4.OA.2***<br>Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.<br>***4.OA.3***<br>Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter | |
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| | | | | | | standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. | |
| HOMEWORK | 9 | Topic 9 Pre-Test | 222-223 | | | | |
| 1 Day | 9 | Correct together: Topic 9 Pre-Test<br><br>TOPIC 9 TEST | | | | | *Assign Topic Test as individual work.<br><br>*Test Masters |
| | | **\*Recommendation -** | Assign | Daily Common Core | As | Independent Practice | |
| 1 Day | 11 | Topic 11-1<br>Factors | 258-259 | 4.OA.4<br>4.OA.5 | *Module 3:* Multi-Digit Multiplication and Division Module 5: Fraction Equivalence, Ordering, and Operations | ***4.OA.4*** Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the | |

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| | | | | | range 1– 100 is prime or composite. ***4.OA.5*** Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way. | |
| 1 Day | 11 | Topic 11-2 Prime and Composite Numbers | 260-261 | 4.OA.4 | ***Module 3***: Multi-Digit Multiplication and Division | ***4.OA.4*** Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a | Use chart on page 261 to 100. |

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| | | | | | | given whole number in the range 1– 100 is prime or composite. | |
| 1 Day | 11 | Topic 11-3 Multiples | 262-263 | 4.OA.4 4.OA.5 | *Module 3:* Multi-Digit Multiplication and Division<br><br>Module 5: Fraction Equivalence, Ordering, and Operations | *4.OA.4* Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1– 100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1– 100 is prime or composite. *4.OA.5* Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate | Vocabulary – factors, multiples |

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| | | | | | | between odd and even numbers. Explain informally why the numbers will continue to alternate in this way. | |
| 2 Days | 11 | Topic 11-4 Equivalent Fractions | 264-267 | 4.NF.1 4.NF.2 | *Module 5:* Fraction Equivalence, Ordering, and Operations | *4.NF.1* Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. **4.NF.2** Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. | Fraction tiles/chart |

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| | | | | | Module 5: | 4.NF.1 | On number line – count spaces not lines. |
|---|---|---|---|---|---|---|---|
| 1 Day | 11 | Topic 11-5 Number Lines and Equivalent Fractions | 268-269 | 4.NF.1 4.NF.2 | *Module 5:* Fraction Equivalence, Ordering, and Operations | *4.NF.1* Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. *4.NF.2* Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. | On number line – count spaces not lines. |
| 1 Day | 11 | Topic 11-6 Comparing Fractions | 270-273 | 4.NF.2 | *Module 5:* Fraction Equivalence, Ordering, | *4.NF.2* Compare two fractions with different numerators and different denominators, e.g., by | Cross multiply, Benchmark fractions, Learnzillion videos. |

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| | | | | | and Opera tions | creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or | |
| 1 Day | 11 | Topic 11-7 Ordering Fractions | 274-275 | 4.NF.2 | *Module 5:* Fraction Equiva lence, Ordering, and Opera tions | *4.NF.2* Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or | Benchmark fractions, common denominator. |
| SKIP | 11 | Topic 11-8 Problem Solving: Writing to Explain | 276-279 | 4.NF.2 4.NF.1 | *Module 5:* Fraction Equiva lence, | *4.NF.2* Compare two fractions with different numerators and different | |

| | | | | Ordering, and Operations | denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. ***4.NF.1*** Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. | |
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| HOMEWORK | 11 | Topic 11 Pre-Test | 284-285 | | | |

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| 1 Day | 11 | Correct together:<br>Topic 11 Pre-Test<br><br>TOPIC 11 TEST | | | | | *Assign Topic Test as individual work.<br><br>*Test Masters |
|---|---|---|---|---|---|---|---|
| | | **\*Recommendation -** | Assign | Daily Common Core | As | Independent Practice | |
| 1 Day | 12 | Topic 12-1<br>Modeling Addition of Fractions | 290-291 | 4.NF.3<br>4.NF.3.a | *Module 5*<br>Fraction Equivalence, Ordering, and Operations | **4.NF.3**<br>Understand a fraction a/b with a > 1 as a sum of fractions 1/b.<br>4.NF.3a.<br>Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. | |
| May combine Topics 12-2 and 12-4 | 12 | | | | | | |
| 1 Day with 12-4 | 12 | Topic 12-2<br>Adding Fractions with Like Denominators | 292-293 | 4.NF.3.a<br>4.NF.3.d | *Module 5*<br>Fraction Equivalence, Ordering, and Operations | **4.NF.3.a**<br>Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.<br>**4.NF.3.d**<br>Solve word problems involving addition and subtraction of fractions | |

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| | | | | | | referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem. | |
| 1 Day | 12 | Topic 12-3 Modeling Subtraction of Fractions | 294-295 | 4.NF.3.a 4.NF.3.d | *Module 5* Fraction Equivalence, Ordering, and Operations | *4.NF.3.a* Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. 4.NF.3.d Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem. | Keep modeling separate from computation. |
| 1 Day with 12-2 | 12 | Topic 12-4 Subtracting Fractions with Like Denominators | 296-297 | 4.NF.3.a 4.NF.3.d | *Module 5* Fraction Equivalence, Ordering, and Operations | *4.NF.3.a* Understand  addition and subtraction of fractions as joining and separating parts referring to the same whole. *4.NF.3.d* Solve word problems involving addition and subtraction of fractions referring to the same | |

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| | | | | | | whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem. | |
| 1 Day | 12 | Topic 12-5 Adding and Subtracting on the Number Line | 298-301 | 4.NF.3.a 4.NF.3.d | *Module 5* Fraction Equivalence, Ordering, and Operations | *4.NF.3.a* Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. *4.NF.3.d* Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem. | |
| 2 Days | 12 | Topic 12-6 Improper Fractions and Mixed Numbers | 302-305 | 4.NF.3.c 4.NF.3.b | *Module 5* Fraction Equivalence, Ordering, and Operations | *4.NF.3.c* Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction | Keep separate: 1 day Mixed Numbers 1 day Improper Fractions |

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| | | | | | ***4.NF.3.b*** Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: 3/8 = 1/8 + 1/8 + 1/8 ; 3/8 = 1/8 + 2/8 ; 2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8. | |
| 2 Days | 12 | Topic 12-7 Modeling Addition and Subtraction of Mixed Numbers | 306-309 | 4.NF.3.c 4.NF.3.b | ***Module 5*** Fraction Equivaence, Ordering, and Operations | ***4.NF.3.c*** Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction ***4.NF.3.b*** Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify | |

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| | | | | | decompositions, e.g., by using a visual fraction model. Examples: 3/8 = 1/8 + 1/8 + 1/8 ; 3/8 = 1/8 + 2/8 ; 2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8. | |
| May combine Topics 12-8 and 12-9 | 12 | | | | | |
| 1 Day with 12-9 | 12 | Topic 12-8 Adding Mixed Numbers | 310-311 | 4.NF.3.c | *Module 5* Fraction Equiva lence, Ordering, and Opera tions | *4.NF.3.c* Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction | |
| 1 Day with 12-8 | 12 | Topic 12-9 Subtracting Mixed Numbers | 312-313 | 4.NF.3.c | *Module 5* Fraction Equiva lence, Ordering, and Opera tions | *4.NF.3.c* Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction | |

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| 1 Day | 12 | Topic 12-10 Decomposing and Composing Fractions | 314-315 | 4.NF.3.b 4.NF.3.d | ***Module 5*** Fraction Equivalence, Ordering, and Operations | ***4.NF.3.b*** Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: $3/8 = 1/8 + 1/8 + 1/8$ ; $3/8 = 1/8 + 2/8$ ; $2\ 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$. 4.NF.3.d Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem. | |

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| 1 Day | 12 | Topic 12-11<br>Problem Solving:<br>Draw a Picture and<br>Write an Equation | 316-319 | 4.NF.3.d<br>4.NF.3.a | **Module 5**<br>Fraction Equivalence, Ordering, and Operations | **4.NF.3.d**<br>Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.<br>**4.NF.3.a**<br>Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. | Do pages 316-319 together |
| HOMEWORK | 12 | Topic 12 Pre-Test | 322-323 | | | | |
| 1 Day | 12 | Correct together:<br>Topic 12 Pre-Test<br><br>TOPIC 12  TEST | | | | | *Assign Topic Test as individual work.<br><br>*Test Masters |
| | | **\*Recommendation -** | Assign | Daily Common Core | As | Independent Practice | |

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| 1 Day | 13 | Topic 13-1 Fractions as Multiples of Unit Fractions: Using Models | 330 - 331 | 4.NF.4.a | **Module 5** Fraction Equivalence, Ordering, and Operations | **4.NF.4 a** Understand a fraction a/b as a multiple of 1/b. For example, use a visual fraction model to represent 5/4 as the product 5 × (1/4), recording the conclusion by the equation 5/4 = 5 × (1/4). b | |
| 1 Day | 13 | Topic 13-2 Multiplying a Fraction by a Whole Number: Using Models | 332 – 333 | 4.NF.4.b | **Module 5** Fraction Equivalence, Ordering, and Operations | **4.NF.4.b** Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express 3 × (2/5) as 6 × (1/5), recognizing this product as 6/5. (In general, n × (a/b) = (n × a)/b.) | |
| 1 Day | 13 | Topic 13-3 Multiplying a Fraction by a Whole Number: Using Symbols | 334 – 335 | 4.NF.4.c | **Module 5** Fraction Equivalence, Ordering, and Operations | **4.NF.4.c** Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat 3/8 of a pound of roast beef, and there will be 5 | |

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| | | | | | | people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie? | |
| 1 Day | 13 | Topic 13-4 Fractions and Decimals **10ths** | 336 – 337 | 4.NF.5 4.NF.6 | *Module 6* Decimal Fractions | *4.NF.5* Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.2 For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.

4.NF.6. Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram. | **10ths** – Use extra supplements |
| 1 Day | 13 | Topic 13-4 Fractions and Decimals **100ths** | 336 - 337 | 4.NF.5 4.NF.6 | *Module 6* Decimal Fractions | *4.NF.5* Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two | **100th** – Use extra supplements |

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| | | | | | fractions with respective denominators 10 and 100.2 For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100. **4.NF.6** Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram. | |
| SKIP/Optional | 13 | Topic 13-5 Fractions and Decimals on a Number Line | 338 - 341 | 4.NF.5 4.NF.6 | *Module 6* Decimal Fractions | *4.NF.5* Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.2 For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100. <br><br> *4.NF.6* Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 | |

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| | | | | | | as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram. | |
| 1 Day | 13 | Topic 13-6 Equivalent Fractions and Decimals | 342 – 345 | 4.NF.6 4.NF.5 | *Module 6* Decimal Fractions | ***4.NF.6*** Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram. ***4.NF.5*** Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.2 For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100. | |
| 1 Day | 13 | Topic 13-7 Decimal Place Value | 346 – 347 | 4.NF.7 | *Module 6* Decimal Fractions | ***4.NF.7*** Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid | |

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| | | | | | | only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model. | |
| 1 Day | 13 | Topic 13-8 Comparing and Ordering Fractions **COMPARE** | 348 – 351 | 4.NF.7 | *Module 6* Decimal Fractions | *4.NF.7* Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model. | **Compare only** |
| 1 Day | 13 | Topic 13-8 Compare and Ordering Fractions **ORDER** | 348 – 351 | 4.NF.7 | *Module 6* Decimal Fractions | *4.NF.7* Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and | **Order only** |

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| | | | | | | justify the conclusions, e.g., by using a visual model. | |
| 1 Day | 13 | Topic 13-9 Using Money to Understand Decimals | 353 – 353 | 4.MD.2 4.NF.7 | **Module 5** Fraction Equiva-lence, Ordering, and Opera-tions. **Module 6** Decimal Fractions. | **4.MD.2** Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. **4.NF.7** Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the | May want to do 15-3 also. Extra money practice. Use extra supplements. Money. |

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| | | | | | symbols >, =, or <, and justify the conclusions, e.g., by using a visual model. | |
| 1 Day | 13 | Topic 13-10 Problem Solving: Draw a Picture | 354 – 355 | 4.NF.6 4.MD.1 4.MD.2 | **Module 6** Decimal Fractions<br><br>**Module 2** Unit Conversions and Problem Solving with Metric Measurement | **4.NF.6** Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram. Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. **4.MD.1** Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For | Do pages 354 and 355 together. |

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| | | | | | example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...<br>***4.MD.2***<br> Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. | |
| Homework | 13 | Topic 13 Pre-Test | 360 – 361 | | | |

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| 1 Day | 13 | Correct together:<br>Topic 13 Pre-Test<br><br>Assign: Topic 13 Test | | | | | Assign Topic Test as individual work.<br><br>Test Masters |
| | | **\*Recommendation-** | Assign | Daily Common Core | As | Independent Practice | |
| 1 Day | 14 | Topic 14-1<br>Using Customary Units of Length | 366 – 367 | 4.MD.1 | *Module 2*<br>Unit Conversion and Problem Solving with Metric Measurement | *4.MD.1*<br>Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... | |

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|---|---|---|---|---|---|---|---|
| 1 Day | 14 | Topic 14-2 Customary Units of Capacity | 368 – 369 | 4.MD.1 | *Module 2* Unit Conversion and Problem Solving with Metric Measurement | *4.MD.1* Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... | Use models |
| 1 Day | 14 | Topic 14-3 Units of Weight | 370 – 371 | 4.MD.1 | *Module 2* Unit Conversion and Problem Solving with Metric Measurement | *4.MD.1* Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record | |

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| | | | | | | measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... | |
| 1 Day | 14 | Topic 14-4 Changing Customary Units | 372 – 375 | 4.MD.1 | **Module 2** Unit Conversion and Problem Solving with Metric Measurement | ***4.MD.1*** Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... | Do pages 372-375 together. |

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|---|---|---|---|---|---|---|---|
| 1 Day | 14 | Topic 14-5 Problem Solving: Writing to Explain | 376 – 377 | 4.MD.1 | **Module 2** Unit Conversion and Problem Solving with Metric Measurement | **4.MD.1** Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... | Do pages 376-377 together. |
| 1 Day | 14 | Topic 14-6 Using Metric Units of Length | 378 – 379 | 4.MD.1 | **Module 2** Unit Conversion and Problem Solving with Metric Measurement | **4.MD.1** Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record | |

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| | | | | | | measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... | |
| 1 Day | 14 | Topic 14-7 Metric Units of Capacity | 380 – 381 | *4.MD.1* | Module 2 Unit Conver sion and Problem Solving with Metric Measure ment | *4.MD.1* Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... | |

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| 1 Day | 14 | Topic 14-8<br>Units of Mass | 382 – 383 | 4.MD.1 | **Module 2**<br>Unit Conversion and Problem Solving with Metric Measurement | **4.MD.1**<br>Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... | |
| 1 Day | 14 | Topics 14-9<br>Changing Metric Units | 384 – 387 | 4.MD.1 | **Module 2**<br>Unit Conversion and Problem Solving with Metric Measurement | **4.MD.1**<br>Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record | Do pages 384-387 together. |

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| | | | | | | measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... | |
| 1 Day | 14 | Topic 14-10 Units of Time | 388 - 389 | 4.MD.1 4.MD.2 | *Module 2* Unit Conversion and Problem Solving with Metric Measurement | *4.MD.1* Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... | |

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| | | | | | ***4.MD.2*** Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. | |
| 1 Day | 14 | Topic 14-11 Problem Solving: Work Backward | 390 – 391 | 4.MD.2 4.MD.1 | ***Module 2*** Unit Conversion and Problem Solving with Metric Measurement | ***4.MD.2*** Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a | Do pages 390 and 390 together. |

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| | | | | | smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.<br>***4.MD.1***.<br>Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... | |
| Homework | 14 | Topic 14 Pre-Test | 396 – 397 | | | |

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| 1 Day | 14 | Correct together: Topic 14 Pre-Test<br><br>Assign: Topic 14 Test | | | | | Assign Topic Test as individual work.<br><br>Test Masters. |
| | | **\*Recommendations -** | Assign | Daily Common Core | As | Independent Practice | |
| 2 – 4 Days | 15 | Topic 15-1 Solving Perimeter and Area Problems | 403 – 403 | 4.MD.3 | *Module 3* Multi-Digit Multiplication and Division | *4.MD.3* Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor. | Keep Perimeter and Area separate. Use supplements. |
| Optional | 15 | Topic 15-2 Solving Measurement Problems | 404 – 405 | 4.MD.2 | *Module 6* Decimal Fractions | *4.MD.2* Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing | |

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| | | | | | | measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. | |
| 1 Day | 15 | Topic 15-3 Solving Problems Involving Money | 406 – 407 | 4.MD.2 | *Module 6* Decimal Fractions | *4.MD.2* Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. | *Could do this lesson when doing Topic 13-9. |
| 1 Day | 15 | Lesson 15-4 Solving Problems Involving Line Plots | 408 – 409 | 4.MD.4 | *Module 6* Decimal Fractions | *4.MD.4* Make a line plot to display a data set of measurements in fractions | |

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| | | | | | | of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection. | |
| Optional | 15 | Lesson 15-5 Solve a Simpler Problem and Make a Table | 410 – 413 | 4.MD.2 | *Module 6* Decimal Fractions | *4.MD.2* Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. | |

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| Optional | 15 | Assign: Topic 15 Test | | | | | Assign Topic Test as individual work.<br><br>Test Masters. |
| | | **\*Recommendations -** | Assign | Daily Common Core | As | Independent Practice. | |
| 1 Day | 16 | Lesson 16-1<br>Points, Lines and Planes | 422 – 423 | 4.G.1 | *Module 4*<br>Angle Measure and Plane Figures | *4.G.1*<br>Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. | |
| 2 Days | 16 | Lesson 16-2<br>Line Segments, Rays, and Angles | 424 – 425 | 4.G.1 | *Module 4*<br>Angle Measure and Plane Figures | *4.G.1*<br>Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. | 1 Day: Line Segments and Rays<br><br>1 Day: Angles |
| 1 Day | 16 | Lesson 16-3<br>Understanding Angles and Unit Angles | 426 – 427 | 4.MD.5.a<br>4.MD.5<br>4.G.1 | *Module 4*<br>Angle Measure and Plane Figures | *4.MD.5.a*<br>An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns | Do pages 426 and 427 together. |

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| | | | | | | through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles. *4.MD.5* Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: *4.G.1* Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. | |
| 1 Day | 16 | Lesson 16-4 Measuring with Unit Angles | 428 – 429 | 4.MD.5.b | *Module 4* Angle Measure and Plane Figures | *4.MD.5.b* An angle that turns through n one-degree angles is said to have an angle measure of n degrees. | Do pages 428 and 429 together. |
| 2 Days | 16 | Lesson 16-5 Measuring Angles | 430 – 431 | 4.MD.6 4.MD.5.a 4.MD.5.b 4.G.1 | *Module 4* Angle Measure and Plane Figures | *4.MD.6* Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure *4.MD.5.a* An angle is measured with reference to a circle with | Do pages 430 and 431 together. |

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| | | | | | its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles. **4.MD.5.b** An angle that turns through n one-degree angles is said to have an angle measure of n degrees. **4.G.1** Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. | |
| 1 Day | 16 | Lesson 16-6 Adding and Subtracting Angle Measures | 432 – 433 | 4.MD.7 4.MD.5.a 4.MD.5.b 4.MD.6 | *Module 4* Angle Measure and Plane Figures | **4.MD.7** Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and | Do pages 432 and 433 together. |

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| | | | | | subtraction problems to find 28 unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.<br>***4.MD.5.a***<br>An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles.<br>**4.MD.5.b**<br>An angle that turns through n one-degree angles is said to have an angle measure of n degrees.<br>**4.MD.6**<br>Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure | |

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| 1 Day | 16 | Lesson 16-7 Polygons | 434 – 435 | 4.G.2 | **Module 4** Angle Measure and Plane Figures | **4.G.2** Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. | |
| 2 Days | 16 | Lesson 16-8 Triangles | 436 – 437 | 4.G.2 | **Module 4** Angle Measure and Plane Figures | **4.G.2** Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. | 1 Day sides 1 Day angles *use supplements |
| 1 Day | 16 | Lesson 16-9 Quadrilaterals | 438 – 439 | 4.G.2 | **Module 4** Angle Measure and Plane Figures | **4.G.2** Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a | |

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| | | | | | | specified size. Recognize right triangles as a category, and identify right triangles. | |
| 1 Day | 16 | Lesson 16-10 Line Symmetry | 440 – 441 | 4.G.3 | **Module 4** Angle Measure and Plane Figures | *4.G.3* Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry. | |
| Optional | 16 | Lesson 16-11 Make and Test Generalizations | 442 – 443 | 4.G.2 4.OA.5 | **Module 4** Angle Measure and Plane Figures | *4.G.2* Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. *4.OA.5* Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. | Do pages 442 and 443 together. |

| | | | | | | For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way | |
|---|---|---|---|---|---|---|---|
| Homework | 16 | Topic 16 Pre-Test | 448 – 449 | | | | |
| 1 Day | 16 | Correct together: Topic 16 Pre-Test<br><br>Assign: Topic 16 Test | | | | | Assign Topic Test As individual work.<br><br>Test Masters |