## Teacher Edition:

 Planning and Pacing GuideGrade 5

## Pacing Guide

Build Understanding Connect Concepts and Skills

| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
| :---: | :---: | :---: |
| Unit 1 Whole numbers, expressions, and volume |  |  |
| Module 1: Whole Number Place Value and Multiplication |  |  |
| Lesson 1.1 <br> Recognize the 10 to 1 Relationship Among Place-Value Positions | 5.NS. 3 Recognize the relationship that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right, and inversely, a digit in one place represents $\frac{1}{10}$ of what it represents in the place to its left. | 1 day |
| Lesson 1.2 <br> Use Powers of 10 and Exponents | 5.NS. 4 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10 , and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10 . Use whole-number exponents to denote powers of 10. | 1 day |
| Lesson 1.3 <br> Use a Pattern to Multiply by Multiples of 10,100 , and 1,000 | 5.NS. 4 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10 , and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. | 1 day |
| Lesson 1.4 <br> Multiply by 1-Digit Numbers | 5.C. 1 Multiply multi-digit whole numbers fluently using a standard algorithmic approach. | 1 day |
| Lesson 1.5 <br> Multiply by MultiDigit Numbers | 5.C. 1 Multiply multi-digit whole numbers fluently using a standard algorithmic approach. | 1 day |
| Lesson 1.6 <br> Develop <br> Multiplication <br> Fluency | 5.C. 1 Multiply multi-digit whole numbers fluently using a standard algorithmic approach. | 1 day |

In addition to the core instructional pacing below, HMH recommends the following:

- 3 days per year for the Growth Measure assessments
- 2 days per module for the Module Opener, Are You Ready?, Module Review, and Module Test
- 1 day per unit for the Performance Task

Using these recommendations, the total pacing for Grade 5 is 184 days.

| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
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| Module 2: Understand Division of Whole Numbers | 5.C.2 Find whole-number quotients and remainders with up to four-digit <br> dividends and two-digit divisors, using strategies based on place value, the <br> properties of operations, and/or the relationship between multiplication and <br> division. Describe the strategy and explain the reasoning used. | 1 day |
| Lesson 2.1 <br> Relate Multiplication <br> to Division | 5.C.2 Find whole-number quotients and remainders with up to four-digit <br> dividends and two-digit divisors, using strategies based on place value, the <br> properties of operations, and/or the relationship between multiplication and <br> division. Describe the strategy and explain the reasoning used. | 2 days |
| Lesson 2.2 <br> Represent Division <br> with 2-Digit Divisors | 5.C.2 Find whole-number quotients and remainders with up to four-digit <br> dividends and two-digit divisors, using strategies based on place value, the <br> properties of operations, and/or the relationship between multiplication and <br> division. Describe the strategy and explain the reasoning used. | 1 day |
| Lesson 2.3 <br> Estimate with 2-Digit <br> Divisors | 5.C.2 Find whole-number quotients and remainders with up to four-digit <br> dividends and two-digit divisors, using strategies based on place value, the <br> properties of operations, and/or the relationship between multiplication and <br> division. Describe the strategy and explain the reasoning used. | 1 day |
| Lesson 2.4 <br> Use Partial Quotients |  |  |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
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| Module 3: Practice Division of Whole Numbers | 1 day |  |
| Lesson 3.1 <br> Divide by 2-Digit <br> Divisors | 5.C.2 Find whole-number quotients and remainders with up to four-digit <br> dividends and two-digit divisors, using strategies based on place value, the <br> properties of operations, and/or the relationship between multiplication and <br> division. Describe the strategy and explain the reasoning used. | (5.C.2 Find whole-number quotients and remainders with up to four-digit <br> dividends and two-digit divisors, using strategies based on place value, the <br> properties of operations, and/or the relationship between multiplication and <br> division. Describe the strategy and explain the reasoning used. <br> 5.AT.1 Solve real-world problems involving multiplication and division of <br> whole numbers (e.g., by using equations to represent the problem). In <br> division problems that involve a remainder, explain how the remainder <br> affects the solution to the problem. <br> Interpret the <br> Remainder |
| 5.C.2 Find whole-number quotients and remainders with up to four-digit <br> dividends and two-digit divisors, using strategies based on place value, the <br> properties of operations, and/or the relationship between multiplication and <br> division. Describe the strategy and explain the reasoning used. | 1 day |  |
| Lesson 3.3 <br> Adjust Quotients | 5.C.2 Find whole-number quotients and remainders with up to four-digit <br> dividends and two-digit divisors, using strategies based on place value, the <br> properties of operations, and/or the relationship between multiplication and <br> division. Describe the strategy and explain the reasoning used. | 1 day |
| Lesson 3.4 <br> Practice with Division |  |  |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
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| Module 4: Expressions |  |  |
| Lesson 4.1 <br> Write Numerical Expressions | 5.C.9 Evaluate expressions with parentheses or brackets involving whole numbers using the commutative properties of addition and multiplication, associative properties of addition and multiplication, and distributive property. | 1 day |
| Lesson 4.2 <br> Interpret Numerical Expressions | 5.C.9 Evaluate expressions with parentheses or brackets involving whole numbers using the commutative properties of addition and multiplication, associative properties of addition and multiplication, and distributive property. | 1 day |
| Lesson 4.3 <br> Evaluate Numerical <br> Expressions | 5.C.9 Evaluate expressions with parentheses or brackets involving whole numbers using the commutative properties of addition and multiplication, associative properties of addition and multiplication, and distributive property. | 1 day |
| Lesson 4.4 <br> Use Grouping Symbols | 5.C.9 Evaluate expressions with parentheses or brackets involving whole numbers using the commutative properties of addition and multiplication, associative properties of addition and multiplication, and distributive property. | 1 day |
| INsuccess Lesson <br> Write Algebraic <br> Expressions <br> Use after Lesson 4.4 | 5.AT. 8 Define and use up to two variables to write linear expressions that arise from real-world problems, and evaluate them for given values. | 1 day |
| INsuccess Lesson <br> Evaluate Algebraic <br> Expressions <br> Use after Lesson 4.4 | 5.AT. 8 Define and use up to two variables to write linear expressions that arise from real-world problems, and evaluate them for given values. | 1 day |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
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| Module 5: Volume |  |  |
| Lesson 5.1 <br> Use Unit Cubes to Build Solid Figures | 5.M. 4 Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths or multiplying the height by the area of the base. | 1 day |
| Lesson 5.2 <br> Understand Volume | 5.M. 4 Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths or multiplying the height by the area of the base. | 1 day |
| Lesson 5.3 <br> Estimate Volume | 5.M. 4 Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths or multiplying the height by the area of the base. | 1 day |
| Lesson 5.4 <br> Find Volume of Right Rectangular Prisms | 5.M.4 Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths or multiplying the height by the area of the base. <br> 5.M.5 Apply the formulas $V=I \times w \times h$ and $V=B \times h$ for right rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths to solve real-world problems and other mathematical problems. | 2 days |
| Lesson 5.5 <br> Apply Volume Formulas | 5.M.4 Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths or multiplying the height by the area of the base. <br> 5.M. 5 Apply the formulas $V=I \times w \times h$ and $V=B \times h$ for right rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths to solve real-world problems and other mathematical problems. | 1 day |
| Lesson 5.6 <br> Find Volume of Composed Figures | 5.M. 6 Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real-world problems and other mathematical problems. | 2 days |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
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| Unit 2 ADD AND SUBTRACT FRACTIONS AND MIXED NUMBERS |  |  |
| Module 6: Understand Addition and Subtraction of Fractions with Unlike Denominators |  |  |
| Lesson 6.1 <br> RepresentFraction <br> Sums and Differences | 5.AT.2 Solve real-world problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators (e.g., by using visual fraction models and equations to represent the problem). Use benchmark fractions and number sense of fractions to estimate mentally and assess whether the answer is reasonable. | 1 day |
| Lesson 6.2 <br> RepresentAddition with Different-Sized Parts | 5.AT. 2 Solve real-world problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators (e.g., by using visual fraction models and equations to represent the problem). Use benchmark fractions and number sense of fractions to estimate mentally and assess whether the answer is reasonable. | 1 day |
| Lesson 6.3 <br> Represent <br> Subtraction with Different-Sized Parts | 5.AT. 2 Solve real-world problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators (e.g., by using visual fraction models and equations to represent the problem). Use benchmark fractions and number sense of fractions to estimate mentally and assess whether the answer is reasonable. | 1 day |
| Lesson 6.4 <br> Rewrite Fractions with a Common Denominator | 5.C.4 Add and subtract fractions with unlike denominators, including mixed numbers. | 1 day |
| INsuccess Lesson <br> Compare and Order Fractions and Mixed Numbers Use after Lesson 6.4 | 5.NS. 1 Use a number line to compare and order fractions, mixed numbers, and decimals to thousandths. Write the results using $>,=$, and < symbols. | 1 day |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
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| Module 7: Understand Compare Problems | 5.AT.2 Solve real-world problems involving addition and subtraction of <br> fractions referring to the same whole, including cases of unlike <br> denominators (e.g., by using visual fraction models and equations to <br> represent the problem). Use benchmark fractions and number sense of <br> fractions to estimate mentally and assess whether the answer is reasonable. | 1 day |
| Lesson 7.1 <br> Use Benchmarks and <br> Number Sense to <br> Estimate | 5.C.4 Add and subtract fractions with unlike denominators, including mixed <br> numbers. | 1 day |
| Lesson 7.2 <br> Assess <br> Reasonableness of <br> Fraction Sums and <br> Differences | 5.C.4 Add and subtract fractions with unlike denominators, including mixed <br> numbers. <br> 5.AT.2 Solve real-world problems involving addition and subtraction of <br> fractions referring to the same whole, including cases of unlike <br> denominators (e.g., by using visual fraction models and equations to <br> represent the problem). Use benchmark fractions and number sense of <br> fractions to estimate mentally and assess whether the answer is reasonable. | 1 day |
| Lesson 7.3 <br> Assess <br> Reasonableness of <br> Mixed Number Sums <br> and Differences | 5.C.4 Add and subtract fractions with unlike denominators, including mixed <br> numbers. | $\mathbf{2}$ days |
| Lesson 7.4 <br> Rename Mixed <br> Numbers to Subtract | 5.C.4 Add and subtract fractions with unlike denominators, including mixed <br> numbers. <br> fractions referring to the same whole, including cases of unlike <br> denominators (e.g., by using visual fraction models and equations to <br> represent the problem). Use benchmark fractions and number sense of <br> fractions to estimate mentally and assess whether the answer is reasonable. | 1 day |
| Lesson 7.5 <br> Apply Properties of <br> Addition | Lesson 7.6 <br> Substraction Using <br> Equations | 1 day |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
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| Unit 3 MULTIPLY FRACTIONS AND MIXED NUMBERS |  |  |
| Module 8: Understand Multiplication of Fractions |  |  |
| INsuccess Lesson <br> Fractions of a Whole Use before Lesson 8.1 | 5.NS.2 Explain different interpretations of fractions, including: as parts of a whole, parts of a set, and division of whole numbers by whole numbers. | 1 day |
| INsuccess Lesson <br> Fractions of a Group <br> Use before Lesson 8.1 | 5.NS.2 Explain different interpretations of fractions, including: as parts of a whole, parts of a set, and division of whole numbers by whole numbers. | 1 day |
| Lesson 8.1 <br> Explore Groups of Equal Shares to Show Multiplication | 5.C.6 Explain why multiplying a positive number by a fraction greater than one results in a product greater than the given number. Explain why multiplying a positive number by a fraction less than 1 results in a product smaller than the given number. Relate the principle of fraction equivalence, $\frac{(n \times a)}{(n \times b)}$, to the effect of multiplying $\frac{a}{b}$ by one. | 1 day |
| Lesson 8.2 <br> Represent <br> Multiplication of Whole Numbers by Fractions | 5.C.6 Explain why multiplying a positive number by a fraction greater than one results in a product greater than the given number. Explain why multiplying a positive number by a fraction less than 1 results in a product smaller than the given number. Relate the principle of fraction equivalence, $\frac{(n \times a)}{(n \times b)}$, to the effect of multiplying $\frac{a}{b}$ by one. | 2 days |
| Lesson 8.3 <br> Represent <br> Multiplication with Unit Fractions | 5.C.6 Explain why multiplying a positive number by a fraction greater than one results in a product greater than the given number. Explain why multiplying a positive number by a fraction less than 1 results in a product smaller than the given number. Relate the principle of fraction equivalence, $\frac{(n \times a)}{(n \times b)}$, to the effect of multiplying $\frac{a}{b}$ by one. | 1 day |
| Lesson 8.4 <br> Represent <br> Multiplication of Fractions | 5.C.6 Explain why multiplying a positive number by a fraction greater than one results in a product greater than the given number. Explain why multiplying a positive number by a fraction less than 1 results in a product smaller than the given number. Relate the principle of fraction equivalence, $\frac{(n \times a)}{(n \times b)}$, to the effect of multiplying $\frac{a}{b}$ by one. <br> 5.AT. 3 Solve real-world problems involving multiplication of fractions, including mixed numbers (e.g., by using visual fraction models and equations to represent the problem). | 1 day |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
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| Lesson 8.5 <br> Use Representation of Area to Develop Procedures | 5.C.6 Explain why multiplying a positive number by a fraction greater than one results in a product greater than the given number. Explain why multiplying a positive number by a fraction less than 1 results in a product smaller than the given number. Relate the principle of fraction equivalence, $\frac{(n \times a)}{(n \times b)}$, to the effect of multiplying $\frac{a}{b}$ by one. <br> 5.M. 2 Find the area of a rectangle with fractional side lengths by modeling with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. | 2 days |
| Lesson 8.6 <br> Interpret Fraction <br> Multiplication as Scaling | 5.C.3 Compare the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. <br> 5.C. 6 Explain why multiplying a positive number by a fraction greater than one results in a product greater than the given number. Explain why multiplying a positive number by a fraction less than 1 results in a product smaller than the given number. Relate the principle of fraction equivalence, $\frac{(n \times a)}{(n \times b)}$, to the effect of multiplying $\frac{a}{b}$ by one. | 1 day |
| Lesson 8.7 <br> Multiply Fractions | 5.C.6 Explain why multiplying a positive number by a fraction greater than one results in a product greater than the given number. Explain why multiplying a positive number by a fraction less than 1 results in a product smaller than the given number. Relate the principle of fraction equivalence, $\frac{(n \times a)}{(n \times b)}$, to the effect of multiplying $\frac{a}{b}$ by one. | 1 day |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
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| Module 9: Understand and Apply Multiplication of Mixed Numbers |  |  |
| Lesson 9.1 <br> Explore Area and <br> Mixed Numbers | 5.AT.3 Solve real-world problems involving multiplication of fractions, <br> including mixed numbers (e.g., by using visual fraction models and equations <br> to represent the problem). <br> 5.M.2 Find the area of a rectangle with fractional side lengths by modeling <br> with unit squares of the appropriate unit fraction side lengths, and show that <br> the area is the same as would be found by multiplying the side lengths. <br> Multiply fractional side lengths to find areas of rectangles, and represent <br> fraction products as rectangular areas. | 1 day |
| Lesson 9.2 <br> Multiply Mixed <br> Numbers | 5.AT.3 Solve real-world problems involving multiplication of fractions, <br> including mixed numbers (e.g., by using visual fraction models and equations <br> to represent the problem). | 1 day |
| Lesson 9.3 <br> Practice <br> Multiplication with <br> Fractions and <br> MixedNumbers | 5.C.6 Explain why multiplying a positive number by a fraction greater than <br> one results in a product greater than the given number. Explain why <br> multiplying a positive number by a fraction less than 1 results in a product <br> smaller than the given number. Relate the principle of fraction equivalence, <br> (n×a) | 1 day |
| (n×b) the effect of multiplying $\frac{a}{b}$ by one. |  |  |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
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| Unit 4 DIVIDE FRACTIONS AND CONVERT CUSTOMARY UNITS |  |  |
| Module 10: Understand Division with Whole Numbers and Unit Fractions |  |  |
| Lesson 10.1 Interpret a Fractionas Division | 5.AT.4 Solve real-world problems involving division of unit fractions by nonzero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem). | 1 day |
| Lesson 10.2 Represent and Findthe Size of Equal Parts | 5.C. 7 Use visual fraction models and numbers to divide a unit fraction by a non-zero whole number and to divide a whole number by a unit fraction. | 1 day |
| Lesson 10.3 <br> Use Representationsof Division of Unit Fractions by Whole Numbers | 5.C. 7 Use visual fraction models and numbers to divide a unit fraction by a non-zero whole number and to divide a whole number by a unit fraction. <br> 5.AT.4 Solve real-world problems involving division of unit fractions by nonzero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem). | 2 days |
| Lesson 10.4 Represent and Findthe Number of Equal-Sized Parts | 5.C. 7 Use visual fraction models and numbers to divide a unit fraction by a non-zero whole number and to divide a whole number by a unit fraction. | 1 day |
| Lesson 10.5 <br> Use Representations of Division of Whole Numbers by Unit Fractions | 5.C. 7 Use visual fraction models and numbers to divide a unit fraction by a non-zero whole number and to divide a whole number by a unit fraction. <br> 5.AT. 4 Solve real-world problems involving division of unit fractions by non-zero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem). | 2 days |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
| :---: | :---: | :---: |
| Module 11: Divide with Whole Numbers and Unit Fractions |  |  |
| Lesson 11.1 <br> Relate Multiplication and Division of Fractions | 5.C. 7 Use visual fraction models and numbers to divide a unit fraction by a non-zero whole number and to divide a whole number by a unit fraction. | 1 day |
| Lesson 11.2 <br> Divide Whole <br> Numbers by Unit Fractions | 5.AT.4 Solve real-world problems involving division of unit fractions by nonzero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem). | 1 day |
| Lesson 11.3 <br> Interpret and Solve Division of a Whole Number by a Unit Fraction | 5.C.7 Use visual fraction models and numbers to divide a unit fraction by a non-zero whole number and to divide a whole number by a unit fraction. <br> 5.AT. 4 Solve real-world problems involving division of unit fractions by non-zero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem). | 1 day |
| Lesson 11.4 <br> Divide Unit Fractions by Whole Numbers | 5.AT.4 Solve real-world problems involving division of unit fractions by nonzero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem). | 1 day |
| Lesson 11.5 <br> Interpret and Solve Division of a Unit Fraction by a Whole Number | 5.C. 7 Use visual fraction models and numbers to divide a unit fraction by a non-zero whole number and to divide a whole number by a unit fraction. <br> 5.AT. 4 Solve real-world problems involving division of unit fractions by non-zero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem). | 1 day |
| Lesson 11.6 <br> Solve Division Problems Using Visual Models andEquations | 5.AT. 4 Solve real-world problems involving division of unit fractions by non-zero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem). | 1 day |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
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| Module 12: Customary Measurement |  |  |
| Lesson 12.1 <br> Convert Customary <br> Measurements | 5.M. 1 Convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step real-world problems. | 2 days |
| Lesson 12.2 <br> Solve Multistep Customary Measurement Problems | 5.M.1 Convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step real-world problems. | 1 day |
| INsuccess Lesson <br> Collect and Organize <br> Data <br> Use before Lesson 12.3 | 5.DS. 1 Formulate questions that can be addressed with data and make predictions about the data. Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (including frequency tables), line plots, bar graphs, and line graphs. Recognize the differences in representing categorical and numerical data. | 1 day |
| INsuccess Lesson <br> Different Types of Data <br> Use before Lesson 12.3 | 5.DS. 1 Formulate questions that can be addressed with data and make predictions about the data. Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (including frequency tables), line plots, bar graphs, and line graphs. Recognize the differences in representing categorical and numerical data. | 1 day |
| Lesson 12.3 <br> Represent and Interpret Measurement Data in Line Plots | 5.DS. 1 Formulate questions that can be addressed with data and make predictions about the data. Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (including frequency tables), line plots, bar graphs, and line graphs. Recognize the differences in representing categorical and numerical data. | 1 day |
| INsuccess Lesson <br> Make Bar Graphs <br> Use after Lesson 12.3 | 5.DS. 1 Formulate questions that can be addressed with data and make predictions about the data. Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (including frequency tables), line plots, bar graphs, and line graphs. Recognize the differences in representing categorical and numerical data. | 1 day |
| INsuccess Lesson <br> Mean, Median, and Mode <br> Use after Lesson 12.3 | 5.DS. 2 Understand and use measures of center (mean and median) and frequency (mode), to describe a data set. | 1 day |
| INsuccess Lesson <br> Choose an Appropriate Graph Use after Lesson 12.3 | 5.DS. 1 Formulate questions that can be addressed with data and make predictions about the data. Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (including frequency tables), line plots, bar graphs, and line graphs. Recognize the differences in representing categorical and numerical data. | 1 day |
| Lesson 12.4 <br> Convert Time and Find Elapsed Time | 5.M. 1 Convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step real-world problems. | 1 day |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
| :---: | :---: | :---: |
| Unit 5 ADD AND SUBTRACT DECIMALS |  |  |
| Module 13: Decimal Place Value |  |  |
| Lesson 13.1 <br> Understand Thousandths | 5.NS. 3 Recognize the relationship that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right, and inversely, a digit in one place represents $\frac{1}{10}$ of what it represents in the place to its left. | 1 day |
| Lesson 13.2 <br> Read and Write Decimals to Thousandths | 5.NS. 3 Recognize the relationship that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right, and inversely, a digit in one place represents $\frac{1}{10}$ of what it represents in the place to its left. | 1 day |
| Lesson 13.3 Round Decimals | 5.NS. 5 Use place value understanding to round decimal numbers up to thousandths to any given place value. | 1 day |
| Lesson 13.4 <br> Compare and Order Decimals | 5.NS. 1 Use a number line to compare and order fractions, mixed numbers, and decimals to thousandths. Write the results using $>,=$, and < symbols. | 1 day |
| INsuccess Lesson <br> Compare Decimals Use after Lesson 13.4 | 5.NS. 1 Use a number line to compare and order fractions, mixed numbers, and decimals to thousandths. Write the results using $>,=$, and < symbols. | 1 day |
| INsuccess Lesson <br> Order Decimals Use after Lesson 13.4 | 5.NS. 1 Use a number line to compare and order fractions, mixed numbers, and decimals to thousandths. Write the results using $>,=$, and < symbols. | 1 day |
| INsuccess Lesson Understand Percent Use after Lesson 13.4 | 5.NS. 6 Understand, interpret, and model percents as part of a hundred (e.g., by using pictures, diagrams, and other visual models). | 1 day |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
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| Module 14: Add and Subtract Decimals | 5.C.8 Add, subtract, multiply, and divide decimals to hundredths, using models or <br> drawings and strategies based on place value or the properties of operations. <br> Describe the strategy and explain the reasoning. <br> 5.AT.5 价ve real-world problems involving addition, subtraction, multiplication, <br> and division with decimals to hundredths, including problems that involve money <br> in decimal notation (e.g., by using equations, models or drawings and strategies <br> based on place value or properties of operations to represent the problem). |  |
| Lesson 14.1 <br> Represent Decimal <br> Addition | 5.C.8 Add, subtract, multiply, and divide decimals to hundredths, using models or <br> drawings and strategies based on place value or the properties of operations. | 1 day |
| Describe the strategy and explain the reasoning. |  |  |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
| :---: | :---: | :---: |
| Unit 6 MULTIPLY DECIMALS |  |  |
| Module 15: Multiply Decimals and Whole Numbers |  |  |
| Lesson 15.1 <br> Understand Decimal <br> Multiplication Patterns | 5.NS. 4 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10 , and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10 . Use wholenumber exponents to denote powers of 10. <br> 5.C. 8 Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. <br> 5.AT. 5 Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g., by using equations, models or drawings and strategies based on place value or properties of operations to represent the problem). | 2 days |
| Lesson 15.2 <br> Represent <br> Multiplication with Decimals and Whole Numbers | 5.C. 8 Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. <br> 5.AT. 5 Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g., by using equations, models or drawings and strategies based on place value or properties of operations to represent the problem). | 1 day |
| Lesson 15.3 <br> Assess <br> Reasonableness of Products | 5.C. 8 Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. <br> 5.AT. 5 Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g., by using equations, models or drawings and strategies based on place value or properties of operations to represent the problem). | 1 day |
| Lesson 15.4 <br> Multiply Decimals by 1-Digit Whole Numbers | 5.C. 8 Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. <br> 5.AT. 5 Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g., by using equations, models or drawings and strategies based on place value or properties of operations to represent the problem). | 2 days |
| Lesson 15.5 <br> Multiply Decimals by 2-Digit Whole Numbers | 5.C. 8 Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. <br> 5.AT. 5 Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g., by using equations, models or drawings and strategies based on place value or properties of operations to represent the problem). | 1 day |


| Lesson | Indiana Academic Standards: Mathematics (2020), Grade 5 | Pacing |
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| Lesson 15.6 <br> Solve Problems Using <br> Bar Models | 5.C.8 Add, subtract, multiply, and divide decimals to hundredths, using models or <br> drawings and strategies based on place value or the properties of operations. <br> Describe the strategy and explain the reasoning. <br> 5.AT.5 Solve real-world problems involving addition, subtraction, multiplication, <br> and division with decimals to hundredths, including problems that involve money <br> in decimal notation (e.g., by using equations, models or drawings and strategies <br> based on place value or properties of operations to represent the problem). | 1 day |


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| Module 16: Multiply Decimals | 5.C.8 Add, subtract, multiply, and divide decimals to hundredths, using models or <br> drawings and strategies based on place value or the properties of operations. <br> Describe the strategy and explain the reasoning. <br> 5.AT.5 Solve real-world problems involving addition, subtraction, multiplication, <br> and division with decimals to hundredths, including problems that involve money <br> in decimal notation (e.g., by using equations, models or drawings and strategies <br> based on place value or properties of operations to represent the problem). | 1 |  |
| Lesson 16.1 <br> Represent Decimal <br> Multiplication | 5.C.8 Add, subtract, multiply, and divide decimals to hundredths, using models or <br> drawings and strategies based on place value or the properties of operations. <br> Describe the strategy and explain the reasoning. <br> 5.AT.5 Solve real-world problems involving addition, subtraction, multiplication, <br> and division with decimals to hundredths, including problems that involve money <br> in decimal notation (e.g., by using equations, models or drawings and strategies <br> based on place value or properties of operations to represent the problem). | 1 day |  |
| Lesson 16.2 <br> Multiply Decimals | 5.C.8 Add, subtract, multiply, and divide decimals to hundredths, using models or <br> drawings and strategies based on place value or the properties of operations. <br> Describe the strategy and explain the reasoning. <br> 5.AT.5 Solve real-world problems involving addition, subtraction, multiplication, <br> and division with decimals to hundredths, including problems that involve money <br> in decimal notation (e.g., by using equations, models or drawings and strategies <br> based on place value or properties of operations to represent the problem). | 1 day |  |
| Lesson 16.3 <br> Multiply Decimals <br> with Zeros in the <br> Product |  |  |  |


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| Unit 7 DIVIDE DECIMALS AND CONVERT METRIC UNITS |  |  |
| Module 17: Divide Decimals |  |  |
| Lesson 17.1 <br> Understand Decimal Division Patterns | 5.NS. 4 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10 , and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10 . Use wholenumber exponents to denote powers of 10. | 2 days |
| Lesson 17.2 <br> Represent Division of Decimals by Whole Numbers | 5.C. 8 Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. <br> 5.AT. 5 Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g., by using equations, models or drawings and strategies based on place value or properties of operations to represent the problem). | 1 day |
| Lesson 17.3 <br> Assess <br> Reasonableness of Quotients | 5.C. 8 Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. <br> 5.AT. 5 Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g., by using equations, models or drawings and strategies based on place value or properties of operations to represent the problem). | 1 day |
| Lesson 17.4 <br> Divide Decimals by Whole Numbers | 5.C. 8 Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. <br> 5.AT. 5 Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g., by using equations, models or drawings and strategies based on place value or properties of operations to represent the problem). | 1 day |
| Lesson 17.5 <br> Represent Decimal Division | 5.C. 8 Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. <br> 5.AT. 5 Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g., by using equations, models or drawings and strategies based on place value or properties of operations to represent the problem). | 2 days |
| Lesson 17.6 <br> Divide Decimals | 5.C. 8 Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. <br> 5.AT. 5 Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g., by using equations, models or drawings and strategies based on place value or properties of operations to represent the problem). | 1 day |


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| Lesson $\mathbf{1 7 . 7}$ <br> Write Zeros in the <br> Dividend5.C.8 Add, subtract, multiply, and divide decimals to hundredths, using models or <br> drawings and strategies based on place value or the properties of operations. <br> Describe the strategy and explain the reasoning. <br> 5.AT.5 Solve real-world problems involving addition, subtraction, multiplication, <br> and division with decimals to hundredths, including problems that involve money <br> in decimal notation (e.g., by using equations, models or drawings and strategies <br> based on place value or properties of operations to represent the problem). | 1 day |  |


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| Module 18: Customary and Metric Measurement | 1 day |  |
| Lesson 18.1 <br> Understand Metric <br> Conversions | 5.M.1 Convert among different-sized standard measurement units within a <br> given measurement system, and use these conversions in solving multi-step <br> real-world problems. | 5.M.1 Convert among different-sized standard measurement units within a <br> given measurement system, and use these conversions in solving multi-step <br> real-world problems. |
| Lesson 18.2 <br> Solve Customary and <br> Metric Conversion <br> Problems | 1 day <br> Lesson $\mathbf{1 8 . 3}$ <br> Solve Multistep <br> MeasurementSiven measurement system, and use these conversions in solving multi-step <br> Problems | real-world problems. |


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|  | Unit 8 GRAPHS, PATTERNS, AND GEOMETRY |  |
| Module 19: Graphs and Patterns | 5.AT.6 Graph points with whole number coordinates on a coordinate plane. <br> Explain how the coordinates relate the point as the distance from the origin on <br> each axis, with the convention that the names of the two axes and the <br> coordinates correspond (e.g., $x$-axis and $x$-coordinate, $y$-axis and $y$-coordinate). | 1 day |
| Lesson 19.1 <br> Describe a <br> Coordinate System | 5.AT.7 Represent real-world problems and equations by graphing ordered <br> pairs in the first quadrant of the coordinate plane, and interpret coordinate <br> values of points in the context of the situation. | 1 day |
| Lesson 19.2 <br> Understand Ordered <br> Pairs | 5.AT.7 Represent real-world problems and equations by graphing ordered <br> pairs in the first quadrant of the coordinate plane, and interpret coordinate <br> values of points in the context of the situation. | 1 day |
| Lesson 19.3 <br> Use Ordered Pairs to <br> Represent Problems | 5.AT.7 Represent real-world problems and equations by graphing ordered <br> pairs in the first quadrant of the coordinate plane, and interpret coordinate <br> values of points in the context of the situation. | 1 day |
| Lesson 19.4 <br> Generate and <br> Identify Numerical <br> Patterns | 5.AT.7 Represent real-world problems and equations by graphing ordered <br> pairs in the first quadrant of the coordinate plane, and interpret coordinate <br> values of points in the context of the situation. | 1 day |
| Lesson 19.5 <br> Identify and Graph <br> Relationships and <br> Patterns |  |  |


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| Module 20: Classify Two-Dimensional Figures |  |  |
| Lesson 20.1 <br> Identify and Classify Polygons | 5.G.2 Identify and classify polygons including quadrilaterals, pentagons, hexagons, and triangles (equilateral, isosceles, scalene, right, acute and obtuse) based on angle measures and sides. Classify polygons in a hierarchy based on properties. | 1 day |
| Lesson 20.2 <br> Classify and Organize Triangles | 5.G.2 Identify and classify polygons including quadrilaterals, pentagons, hexagons, and triangles (equilateral, isosceles, scalene, right, acute and obtuse) based on angle measures and sides. Classify polygons in a hierarchy based on properties. | 1 day |
| INsuccess Lesson <br> Describe and Draw <br> Triangles <br> Use after Lesson 20.2 | 5.G.1 Identify, describe, and draw triangles (right, acute, obtuse) and circles using appropriate tools (e.g., ruler or straightedge, compass and technology). Understand the relationship between radius and diameter. | 1 day |
| INsuccess Lesson <br> Find Area <br> Use after Lesson 20.2 | 5.M.3 Develop and use formulas for the area of triangles, parallelograms and trapezoids. Solve real-world and other mathematical problems that involve perimeter and area of triangles, parallelograms and trapezoids, using appropriate units for measures. | 1 day |
| INsuccess Lesson <br> Explore Area of Triangles Use after Lesson 20.2 | 5.M.3 Develop and use formulas for the area of triangles, parallelograms and trapezoids. Solve real-world and other mathematical problems that involve perimeter and area of triangles, parallelograms and trapezoids, using appropriate units for measures. | 1 day |
| INsuccess Lesson <br> Area of Triangles <br> Use after Lesson 20.2 | 5.M.3 Develop and use formulas for the area of triangles, parallelograms and trapezoids. Solve real-world and other mathematical problems that involve perimeter and area of triangles, parallelograms and trapezoids, using appropriate units for measures. | 1 day |
| Lesson 20.3 <br> Classify and Organize Quadrilaterals | 5.G.2 Identify and classify polygons including quadrilaterals, pentagons, hexagons, and triangles (equilateral, isosceles, scalene, right, acute and obtuse) based on angle measures and sides. Classify polygons in a hierarchy based on properties. | 1 day |
| INsuccess Lesson <br> Perimeter Formulas <br> Use after Lesson 20.3 | 5.M.3 Develop and use formulas for the area of triangles, parallelograms and trapezoids. Solve real-world and other mathematical problems that involve perimeter and area of triangles, parallelograms and trapezoids, using appropriate units for measures. | 1 day |
| INsuccess Lesson <br> Area of Parallelograms <br> Use after Lesson 20.3 | 5.M.3 Develop and use formulas for the area of triangles, parallelograms and trapezoids. Solve real-world and other mathematical problems that involve perimeter and area of triangles, parallelograms and trapezoids, using appropriate units for measures. | 1 day |
| INsuccess Lesson <br> Explore Area of Trapezoids Use after Lesson 20.3 | 5.M.3 Develop and use formulas for the area of triangles, parallelograms and trapezoids. Solve real-world and other mathematical problems that involve perimeter and area of triangles, parallelograms and trapezoids, using appropriate units for measures. | 1 day |
| INsuccess Lesson <br> Area of Trapezoids <br> Use after Lesson 20.3 | 5.M.3 Develop and use formulas for the area of triangles, parallelograms and trapezoids. Solve real-world and other mathematical problems that involve perimeter and area of triangles, parallelograms and trapezoids, using appropriate units for measures. | 1 day |


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| Lesson 20.4 <br> Use Venn Diagrams <br> to Classify <br> Two-Dimensional <br> Figures | 5.G.2 Identify and classify polygons including quadrilaterals, pentagons, <br> hexagons, and triangles (equilateral, isosceles, scalene, right, acute and <br> obtuse) based on angle measures and sides. Classify polygons in a hierarchy <br> based on properties. | 1 day |
| INsuccess Lesson <br> Circles <br> Use after Lesson 20.4 | 5.G.1 Identify, describe, and draw triangles (right, acute, obtuse) and circles <br> using appropriate tools (e.g., ruler or straightedge, compass and technology). <br> Understand the relationship between radius and diameter. | 1 day |

