

Illustrative Mathematics: 5th Grade Pacing Guide

***Standards that are NOT covered: (You will have to add these in)**

- **5.DA.1:** Collect and interpret data from observations, surveys, and experiments; represent data using frequency tables, scaled bar graphs, and scaled line graphs.

***Standards that are only partially covered: (You might want to add extra practice)**

- **5.NPV.4:** Apply place value understanding to round decimals to any place up to the thousandths.
- **5.GM.7:** Graph points with whole number coordinates on a coordinate plane in the first quadrant, explaining how the coordinates relate to the horizontal and vertical axes to describe the location of points in the plane.
- **5.GM.8:** Represent real-world and mathematical problems by graphing points in the first quadrant on a coordinate plane, interpreting coordinate values of points in the context of the situation.

Unit 1- Finding Volume (16 Days)

Date		Lesson	Standards
//___	Section A: Unit Cubes and Volume	L1: What is Volume?	5.GM.3
//___		L2: Measure Volume	5.GM.3
//___		L3: Volumes of Prism Drawings	5.GM.3
//___		L4: Use Layers to Determine Volume	5.GM.3, 5.GM.4, 5.GM.5, 5.CAR.13
//___		<i>Section A- Checkpoint Assessment</i>	5.GM.3, 5.GM.4, 5.GM.5, 5.CAR.13
//___	Section B: Volume Formulas	L5: Side Lengths of Rectangular Prisms	5.GM.3, 5.GM.4, 5.GM.5
//___		L6: Expressions for Volume	5.GM.3, 5.GM.4, 5.GM.5, 5.CAR.12.,5.CAR.13
//___		L7: Cubic Units of Measure	5.GM.3
//___		<i>Section B- Checkpoint Assessment</i>	5.GM.3, 5.GM.4, 5.GM.5, 5.CAR.12, 5.CAR.13
//___	Section C: Volume of Solid Figures	L8: Figures Made of Prisms	5.GM.3,5.GM.4, 5.GM.5
//___		L9: Measure Figures Made From Prisms	5.GM.3, 5.GM.4, 5.GM.5, 5.CAR.13
//___		L10: Represent Volume with Expressions	5.GM.3,5.GM.4, 5.GM.5, 5.CAR.12, 5.CAR.13
//___		L11: All Kinds of Prisms	5.GM.3, 5.GM.4, 5.GM.5

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//_		L12: Lots and Lots of Garbage *Optional Lesson*	5.GM.3, 5.GM.4, 5.GM.5
//_		<i>Section C- Checkpoint Assessment</i>	5.GM.3, 5.GM.4, 5.GM.5, 5.CAR.12, 5.CAR.13
//_	End-Unit Assessment		

Unit 2 – Fractions as Quotients and Fraction Multiplication (21 Days)

Date		Lesson	Standards
//_	Section A: Fraction as Quotients	L1: Share Sandwiches	5.CAR.6, 5.NPV.6
//_		L2: Share More Sandwiches	5.CAR.6, 5.NPV.6
//_		L3: Interpret Equations	5.CAR.6, 5.NPV.6
//_		L4: Division Situations	5.CAR.6, 5.NPV.6
//_		L5: Relate Division and Fractions	5.CAR.6, 5.NPV.6
//_		<i>Section A- Checkpoint Assessment</i>	5.CAR.6, 5.NPV.6

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//_	Section B: Fractions of Whole Numbers	L6: Relate Division and Multiplication	5.CAR.6, 5.CAR.7, 5.NPV.6, 5.CAR.13
//_		L7: Divide to Multiply Unit Fractions	5.CAR.6, 5.NPV.6, 5.CAR.7
//_		L8: Divide to Multiply Non-Unit Fractions	5.CAR.6, 5.NPV.6, 5.CAR.7, 5.CAR.13
//_		<i>Section B- Checkpoint Assessment</i>	
//_	Section C: Area and Fractional Side Lengths	L9: Relate Area to Multiplication	5.CAR.7, 5.GM.2
//_		L10: Fractional Side Lengths Less Than 1	5.CAR.6, 5.NPV.6, 5.CAR.7, 5.GM.2
//_		L11: Fractional Side Lengths Greater Than 1	5.CAR.6, 5.NPV.6, 5.CAR.7, 5.GM.2
//_		L12: Decompose Rectangles	5.CAR.7
//_		L13: Area and Properties of Operations	5.CAR.7, 5.CAR.12
//_		L14: Area Situations	5.CAR.7
//_		L15: Multiply More Fractions	5.CAR.6, 5.NPV.6, 5.CAR.7, 5.GM.2,
//_		L16: Estimate Products *Optional Lesson*	5.CAR.7, 5.GM.2,
//_		L17: Mosaic Pictures *Optional Lesson*	5.CAR.5, 5.CAR.7
//_		<i>Section C- Checkpoint Assessment</i>	
//_	End-Unit Assessment		

Unit 3 – Multiplying and Dividing Fractions (24 Days)

Date		Lesson	Standards
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$\frac{_}{_} \frac{_}{_}$	Section A: Fraction Multiplication	L1: One Piece of One Part	5.CAR.7
$\frac{_}{_} \frac{_}{_}$		L2: Represent Unit Fraction Multiplication	5.CAR.7
$\frac{_}{_} \frac{_}{_}$		L3: Multiply Unit Fractions	5.CAR.7
$\frac{_}{_} \frac{_}{_}$		L4: Situations about Multiplying Fractions	5.CAR.7
$\frac{_}{_} \frac{_}{_}$		L5: Multiply a Unit Fraction by a Non-Unit Fraction	5.CAR.7
$\frac{_}{_} \frac{_}{_}$		L6: Multiply Fractions	5.CAR.7
$\frac{_}{_} \frac{_}{_}$		L7: Generalize Fraction Multiplication	5.CAR.7
$\frac{_}{_} \frac{_}{_}$		L8: Apply Fraction Multiplication	5.CAR.7, 5.CAR.9
$\frac{_}{_} \frac{_}{_}$		L9: My Own Flag *Optional Lesson*	5.CAR.9
$\frac{_}{_} \frac{_}{_}$		<i>Section A- Checkpoint Assessment</i>	5.CAR.7, 5.CAR.9
$\frac{_}{_} \frac{_}{_}$	Section B: Fraction Division	L10: Concepts of Division *Optional Lesson*	5.CAR.9
$\frac{_}{_} \frac{_}{_}$		L11: Divide Unit Fractions by Whole Numbers	5.CAR.8, 5.CAR.10, 5.CAR.11
$\frac{_}{_} \frac{_}{_}$		L12: Represent Division of Unit Fractions by Whole Numbers	5.CAR.8, 5.CAR.10, 5.CAR.11
$\frac{_}{_} \frac{_}{_}$		L13: Divide Whole Number by Unit Fractions	5.CAR.8, 5.CAR.10, 5.CAR.11
$\frac{_}{_} \frac{_}{_}$		L14: Represent Division of Whole Numbers by Unit Fractions	5.CAR.8, 5.CAR.10, 5.CAR.11
$\frac{_}{_} \frac{_}{_}$		L15: Fraction Division Situations	5.CAR.8, 5.CAR.10, 5.CAR.11
$\frac{_}{_} \frac{_}{_}$		L16: Reason About Quotients	5.CAR.8, 5.CAR.10, 5.CAR.11

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//_		<i>Section B- Checkpoint Assessment</i>	5.CAR.8, 5.CAR.10, 5.CAR.11
//_	Section C: Problem Solving with Fractions	L17: Fraction Multiplication and Division Situations	5.CAR.7, 5.CAR.9,5.CAR.8, 5.CAR.10, 5.CAR.11
//_		L18: Represent Situations with Multiplication and Division	5.CAR.7,5.CAR.9,5.CAR.8, 5.CAR.10, 5.CAR.11
//_		L19: Fraction Games	5.CAR.7, 5.CAR.9, 5.CAR.8, 5.CAR.10, 5.CAR.11
//_		L20: How Much in the Group? *Optional Lesson*	5.CAR.8, 5.CAR.10, 5.CAR.11
//_		<i>Section C- Checkpoint Assessment</i>	5.CAR.7, 5.CAR.9, 5.CAR.8, 5.CAR.10, 5.CAR.11
//_	End-Unit Assessment		

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Unit 4 – Wrapping Up Multiplication and Division with Multi-Digit Numbers (25 Days)

Date		Lesson	Standards
//_	Section A: Multi-Digit Multiplication and Using the Standard Algorithm	L1: Estimate and Find Products	5.CAR.1, 5.CAR.2, 5.CAR.7
//_		L2: Partial Products in Diagrams	5.CAR.1, 5.CAR.2, 5.CAR.7
//_		L3: Partial Products in Algorithms	5.CAR.13
//_		L4: Standard Algorithm: One-Digit and Multi-Digit Numbers with Composing	5.CAR.1
//_		L5: Standard Algorithm: Multi-Digit Numbers without Composing	5.CAR.1
//_		L6: Standard Algorithm: Multi-Digit Numbers with Composing	5.CAR.1
//_		L7: Build Multiplication Fluency	5.CAR.1
//_		L8: Multiplication Fluency	5.CAR.1, 5.CAR.7
//_		L9: The Birds	5.GM.3, 5.GM.4, 5.GM.5, 5.CAR.1
//_		<i>Section A: Checkpoint Assessment</i>	5.GM.3, 5.GM.4, 5.GM.5, 5.CAR.1
//_	Section B: Multi-Digit Division using Partial Quotients	L10: World’s Record Folk Dance	5.CAR.2
//_		L11: Different Partial Quotients	5.CAR.2, 5.CAR.13
//_		L12: An Algorithm Using Partial Quotients	5.CAR.2
//_		L13: Divide Using Partial Quotients	5.CAR.2
//_		L14: Practice an Algorithm Using Partial Quotients	5.CAR.2
//_		L15: Find Missing Side Lengths	5.CAR.1, 5.CAR.2

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//_		L16: World's Record Noodle Soup	5.CAR.2, 5.CAR.6, 5.NPV.6
//_		L17: Fractions as Partial Quotients *Optional Lesson*	5.CAR.13
//_		<i>Section B: Checkpoint Assessment</i>	5.CAR.1, 5.CAR.2
//_	Section C: Let's Put it to Work	L18: Lots of Milk	5.GM.4, 5.GM.5
//_		L19: Trash Talk	5.CAR.1
//_		L20: Shipping Trash	5.GM.4, 5.GM.5, 5.CAR.1, 5.CAR.2
//_		L21: Food Waste Journal *Optional Lesson*	5.GM.3, 5.GM.6, 5.GM.4, 5.GM.5, 5.CAR.1
//_		<i>Section C- Checkpoint Assessment</i>	5.GM.3, 5.GM.6, 5.GM.4, 5.GM.5 5.CAR.1
//_	End-Unit Assessment		

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Unit 5 – Place Value Patterns and Decimal Operations (31 Days)

Date		Lesson	Standards
_ / _ / _	Section A: Numbers to Thousandths	L1: What is 1 Thousandth?	5.NPV.1
_ / _ / _		L2: Thousandths on Grids and in Words	5.NPV.1, 5.NPV.3, 5.NPV.5
_ / _ / _		L3: Thousandths in Expanded Form	5.NPV.1, 5.NPV.3, 5.NPV.5, 5.CAR.12, 5.CAR.13
_ / _ / _		L4: Explore Place Value Relationships *Optional Lesson*	5.NPV.1, 5.NPV.3, 5.NPV.5
_ / _ / _		L5: Compare Decimals	5.NPV.3, 5.NPV.5
_ / _ / _		L6: Compare Decimals on the Number Line	5.NPV.3, 5.NPV.5
_ / _ / _		L7: Round Doubloons	5.NPV.3, 5.NPV.5, 5.NPV.4
_ / _ / _		L8: Round Decimals	5.NPV.4
_ / _ / _		L9: Order Decimals	5.NPV.3, 5.NPV.5

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//_		L10: Solve Problems with Decimals	5.NPV.3, 5.NPV.5, 5.NPV.4	
//_		<i>Section A- Checkpoint Assessment</i>	5.NPV.1, 5.NPV.3, 5.NPV.5, 5.CAR.12, 5.CAR.13	
//_	Section B: Add and Subtract Decimals	L11: Make Sense of Decimal Addition	5.CAR.3, 5.CAR.4	
//_		L12: Estimate and Add	5.CAR.3, 5.CAR.4	
//_		L13: Analyze Addition Mistakes	5.CAR.3, 5.CAR.4	
//_		L14: Make Sense of Decimal Subtraction	5.CAR.3, 5.CAR.4	
//_		L15: Estimate and Subtract	5.CAR.3, 5.CAR.4	
//_		L16: Addition and Subtraction	5.CAR.3, 5.CAR.4	
//_		<i>Section B: Checkpoint Assessment</i>	5.CAR.3, 5.CAR.4	
//_		Section C: Multiply Decimals	L17: Multiply Decimals by Whole Numbers	5.CAR.3, 5.CAR.4, 5.CAR.13
//_			L18: Use Whole Number Facts	5.CAR.3, 5.CAR.4, 5.CAR.12
//_	L19: Use Properties to Multiply Decimals		5.CAR.3, 5.CAR.4, 5.CAR.12, 5.CAR.13	
//_	L20: Products in the Hundredths Place		5.CAR.3, 5.CAR.4, 5.CAR.7	
//_	L21: Multiply More Decimals		5.NPV.1, 5.CAR.3, 5.CAR.4	
//_	<i>Section C- Checkpoint Assessment</i>		5.NPV.1, 5.CAR.3, 5.CAR.4	
//_	Section D: Divide Decimals	L22: Divide Whole Numbers by 0.1 and 0.01	5.CAR.3, 5.CAR.4	
//_		L23: Divide Whole Numbers by Decimals	5.CAR.3, 5.CAR.4	

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//_		L24: Divide Decimals by Whole Numbers	5.CAR.3, 5.CAR.4
//_		L25: Divide Decimals by Decimals	5.CAR.3, 5.CAR.4
//_		L26: Book Drive *Optional Lesson*	5.NPV.3, 5.NPV.5, 5.CAR.3, 5.CAR.4
//_		<i>Section D- Checkpoint Assessment</i>	5.NPV.3, 5.NPV.5, 5.CAR.3, 5.CAR.4
//_	End-Unit Assessment		

Unit 6 – More Decimal and Fraction Operations (25 Days)

Date		Lesson	Standards
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//_	Section A: Measurement Conversions and Powers of 10	L1: Place Value Patterns	5.NPV.1, 5.NPV.2
//_		L2: Powers of 10	5.NPV.1, 5.NPV.2
//_		L3: Metric Conversion and Multiplication by Powers of Ten	5.GM.6, 5.NPV.2
//_		L4: Metric Conversion and Division by Powers of Ten	5.GM.6, 5.NPV.2
//_		L5: Multi-Step Conversion Problems: Metric Length	5.GM.6, 5.NPV.1
//_		L6: Multi-Step Conversion Problems: Metric Liquid Volume	5.GM.6, 5.NPV.1, 5.NPV.2
//_		L7: Multi-Step Conversion Problems: Customary Length	5.GM.6
//_			<i>Section A- Checkpoint Assessment</i>
//_	Section B: Add and Subtract Fractions with Unlike Denominators	L8: Add and Subtract Fractions	5.CAR.5
//_		L9: Use Equivalent Expressions	5.CAR.5
//_		L10: All Sorts of Denominators	5.CAR.5
//_		L11: Different Ways to Subtract	5.CAR.5
//_		L12: Solve Problems	5.CAR.5
//_		L13: Put It All Together: Add and Subtract Fractions	5.CAR.5
//_		L14: Representing Fractions on a Line Plot	5.DA.2, 5.CAR.5
//_		L15: Problem Solving with Line Plots	5.DA.2, 5.CAR.5, 5.CAR.7
//_			<i>Section B- Checkpoint Assessment</i>

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_ / _ / _	Section C: The Size of Products	L16: Compare Products	5.NPV.6
_ / _ / _		L17: Interpret Diagrams	5.NPV.6
_ / _ / _		L18: Compare Without Multiplying	5.NPV.6
_ / _ / _		L19: Compare to 1	5.NPV.6
_ / _ / _		L20: Will it Always Work? *Optional Lesson*	5.NPV.6, 5.CAR.12, 5.CAR.13
_ / _ / _		L21: Weekend Investigation *Optional Lesson*	5.DA.2, 5.CAR.5, 5.CAR.7
_ / _ / _		<i>Section C- Checkpoint Assessment</i>	5.DA.2, 5.CAR.5
_ / _ / _	End-Unit Assessment		

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Unit 7 – Shapes on the Coordinate Plane (17 Days)

<i>Date</i>		<i>Lesson</i>	<i>Standards</i>
//_	Section A: The Coordinate Plane	L1: Explore the Coordinate Grid	5.GM.7, 5.GM.8
//_		L2: Points on the Coordinate Grid	5.GM.7, 5.GM.8
//_		L3: Plot More Points	5.GM.7, 5.GM.8
//_		<i>Section A- Checkpoint Assessment</i>	5.GM.7, 5.GM.8
//_	Section B: The Hierarchy of Shapes	L4: Sort Quadrilaterals	5.GM.1
//_		L5: Trapezoids	5.GM.1
//_		L6: Hierarchy of Quadrilaterals	5.GM.1
//_		L7: Rectangles and Squares	5.GM.1
//_		L8: Sort Triangles	5.GM.1
//_		<i>Section B- Checkpoint Assessment</i>	5.GM.1

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//_	Section C: Numerical Patterns	L9: Generate Patterns	5.CAR.14
//_		L10: Interpret Relationships	5.CAR.14
//_		L11: Patterns and Ordered Pairs	5.CAR.14
//_		L12: Represent Problems on the Coordinate Grid	5.GM.8, 5.CAR.13
//_		L13: Perimeter and Area of Rectangles	5.GM.8, 5.CAR.3, 5.CAR.4, 5.CAR.14
//_		<i>Section C- Checkpoint Assessment</i>	5.GM.8, 5.CAR.3, 5.CAR.4, 5.CAR.14
//_	End-Unit Assessment		

Unit 8 – Putting It All Together (19 Days)

Date		Lesson	Standards
//_	Section A: Multiply and Divide Whole Numbers	L1: Find the Largest Product	5.CAR.1
//_		L2: More Multiplication	5.CAR.1
//_		L3: Factors as a Factor in Our Strategy Choice	5.CAR.1
//_		L4: Dive Back into Division	5.GM.1, 5.CAR.2
//_		L5: More Division	5.CAR.2
//_	Section B:	L6: Revisit Volume	5.GM.4, 5.GM.5

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//_	Apply Volume Concepts	L7: Estimating the Volume of the World's Largest Wagon	5.GM.3, 5.GM.4, 5.GM.5, 5.CAR.1
//_		L8: Filling up the World's Largest Wagon	5.GM.3, 5.GM.4, 5.GM.5, 5.CAR.1, 5.CAR.2
//_		L9: Problem Solving with Volume: Water *Optional Lesson*	5.GM.4, 5.GM.5
//_	Section C: Fraction and Decimal Operations	L10: Here Comes the Sum	5.CAR.5
//_		L11: What's the Difference?	5.CAR.5
//_		L12: Decimal Game Day	5.CAR.3, 5.CAR.4
//_		L13: Multiplying Fractions Game Day	5.CAR.7
//_	Section D: Creation and Design	L14: Notice and Wonder	5.GM.1, 5.GM.7, 5.GM.8, 5.GM.3, 5.GM.4, 5.GM.5, 5.DA.2, 5.NPV.1, 5.NPV.2, 5.NPV.3, 5.NPV.5, 5.CAR.1, 5.CAR.2, 5.CAR.3, 5.CAR.5, 5.CAR.6, 5.CAR.7, 5.NPV.6, 5.CAR.12, 5.CAR.13, 5.CAR.14
//_		L15: Estimation Exploration	5.CAR.1
//_		L16: Number Talk	5.CAR.2
//_		L17: True or False?	5.CAR.5
//_		L18: Which One Doesn't Belong?	5.GM.3,
//_	End-Unit Assessment		