Math: Grade 3

UNIT/Weeks	Timeline/Topics	Essential Questions
2.2	**Place Value** • Place Value Through Thousands • Compare Numbers • Order Numbers • Round to the Nearest Ten • Round to the Nearest Hundred • Problem Solving Investigation: Use the Four-Step Plan	• How can numbers be expressed, ordered, and compared?
3	**Addition Properties** • Patterns in the Addition Table • Addition Patterns • Add Mentally • Estimate Sums • Hands On: Use Models to Add • Add Three-Digit Numbers • Problem-Solving Investigation: Reasonable Answers	• How can place value help me add larger numbers?
3	**Subtraction** • Subtract Mentally • Estimate Differences • Problem Solving Investigation: Estimate or Exact Answer • Hands On: Subtract with Regrouping • Subtract Three-Digit Numbers • Subtract Four-Digit Numbers • Subtract Across Zeros	• How are the operations of subtraction and addition related?
2.8	**Understanding Multiplication** • Hands On: Model Multiplication • Multiplication as Repeated Addition • Hands On: Multiply with Arrays • Arrays and Multiplication • Problem-Solving Investigation: Make a Table • Use Multiplication to Find Combinations	• What does multiplication mean?

1.6	**Understanding Division** • Hands On: Model Division • Division as Equal Sharing • Relate Division and Subtraction • Hands On: Relate Division and Multiplication • Inverse Operations • Problem-Solving Investigation: Use Models	• What does division mean?
1.2	**Multiplication and Division Patterns** • Patterns in the Multiplication Table • Multiply by 2 • Divide by 2 • Multiply by 5 • Divide by 5 • Problem-Solving Investigation: Looking for a Pattern • Multiply by 10 • Divide by 10	• What is the importance of patterns in learning multiplication and division?
3.8	**Multiplication and Division** • Multiply by 3 • Divide by 3 • Hands On: Double a Known Fact • Multiply by 4 • Divide by 4 • Problem-Solving Investigation: Extra or Missing Information • Multiply by 0 and 1 • Divide by 0 and 1	• What strategies can be used to learn multiplication and division facts?
2.6	**Apply Multiplication and Division** • Multiply by 6 • Multiply by 7 • Divide by 6 and 7 • Multiply by 8 • Multiply by 9 • Divide by 8 and 9 • Problem Solving Investigation: Make an Organized List	• How can multiplication and division facts with smaller numbers be applied to larger numbers?

	• Multiply by 11 and 12 • Divide by 11 and 12	
3.2	**Fractions** • Unit Fractions • Part of a Whole • Part of a Set • Problem-Solving Investigation: Draw a Diagram • Hands On: Fractions on a Number Line • Equivalent Fractions • Fractions as One Whole • Compare Fractions	• How can fractions be used to represent numbers and their parts?
2.2	**Perimeter and Area** • Hands On: Find Perimeter • Perimeter • Hands On: Understand Area • Measure Area • Hands On: Tile Rectangles to Find Area • Area of Rectangles • Hands On: Area and the Distributive Property • Area of Composite Figures • Area and Perimeter • Problem-Solving Investigation: Draw a Diagram	• How are perimeter and area related and how are they differen?
2	**Measurement** • Hands On: Estimate and Measure Capacity • Solve Capacity Problems • Hands On: Estimate and Measure Mass • Solve Mass Problems • Tell Time to the Minute • Time Intervals • Problem-Solving Investigation: Work Backward	• Why do we measure?
3.2	**Geometry** • Hands On: Angles	• How can geometric shapes help me solve real-world problems?

	• Polygons • Hands On: Triangles • Quadrilaterals • Shared Attributes of Quadrilaterals • Problem-Solving Investigation: Guess, Check, and Revise • Partition Shapes	
3.4	**Represent and Interpret Data** • Collect and Record Data • Draw Scaled Picture Graphs • Draw Scaled Bar Graphs • Relate Bar Graphs to Scaled Picture Graphs • Draw and Analyze Line plots • Hands On: Measure to Halves and Fourths of an Inch • Collect and Display Measurement Data • Problem-Solving Investigation: Solve a Simpler Problem	• How do we obtain useful information from a set of data?
2.2	**Properties and Equations** • Hands On: Take Apart to Multiply • The Distributive Property • Hands On: Multiply Three Factors • The Associative Property • Write Expressions • Evaluate Expressions • Write Equations • Solve Two-Step Word Problems • Problem-Solving Investigation: Use Logical Reasoning	• How are properties and equations used to group numbers?
1	**Revisit for Mastery** • Fractions	• How are properties of multiplication and division used in fractions?