Main Criteria: Texas Essential Knowledge and Skills (TEKS)

Secondary Criteria: Beta, Gamma

Subject: Mathematics

Grade: 3

Correlation Options: Show Correlated

Texas Essential Knowledge and Skills (TEKS)

Mathematics

Grade: **3** - Adopted: **2012**

TEKS	**111.5.**	**Grade 3, Adopted 2012.**
STUDENT EXPECTATION	**111.5.b.1.**	**Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:**
GRADE LEVEL EXPECTATION	111.5.b.1.A.	Apply mathematics to problems arising in everyday life, society, and the workplace. **Beta** Beta Level **Gamma** Gamma Level
GRADE LEVEL EXPECTATION	111.5.b.1.B.	Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. **Beta** Beta Level **Gamma** Gamma Level
GRADE LEVEL EXPECTATION	111.5.b.1.C.	Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems. **Beta** Beta Level **Gamma** Gamma Level
GRADE LEVEL EXPECTATION	111.5.b.1.D.	Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. **Beta** Beta Level **Gamma** Gamma Level
GRADE LEVEL EXPECTATION	111.5.b.1.E.	Create and use representations to organize, record, and communicate mathematical ideas. **Beta** Beta Level **Gamma** Gamma Level

GRADE LEVEL EXPECTATION	111.5.b.1.F.	Analyze mathematical relationships to connect and communicate mathematical ideas. **Beta** Beta Level **Gamma** Gamma Level
GRADE LEVEL EXPECTATION	111.5.b.1.G.	Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication. **Beta** Beta Level **Gamma** Gamma Level
TEKS	**111.5.**	**Grade 3, Adopted 2012.**
STUDENT EXPECTATION	**111.5.b.2.**	**Number and operations. The student applies mathematical process standards to represent and compare whole numbers and understand relationships related to place value. The student is expected to:**
GRADE LEVEL EXPECTATION	111.5.b.2.A.	Compose and decompose numbers up to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using objects, pictorial models, and numbers, including expanded notation as appropriate. **Beta** Lesson 05: Multiple-Digit Addition and Place Value Notation Lesson 16: Thousands and Place-Value Notation Lesson 17: Rounding to Thousands; Estimation Lesson 18: Multiple-Digit Column Addition; Mental Math Lesson 19: More Multiple-Digit Column Addition Lesson 20: Multiple-Digit Subtraction Lesson 22: Subtraction with Regrouping (Borrowing) Lesson 24: Subtraction: Three-Digit Numbers; Mental Math Lesson 26: Subtraction: Four-Digit Numbers Lesson 28: Subtraction: Multiple-Digit Numbers **Gamma** Lesson 21: Multiple-Digit Multiplication; Place-Value Notation; Distributive Property
GRADE LEVEL EXPECTATION	111.5.b.2.B.	Describe the mathematical relationships found in the base-10 place value system through the hundred thousands place. **Gamma** Lesson 27: Place Value Through Millions; 16 Ounces = 1 Pound
GRADE LEVEL EXPECTATION	111.5.b.2.C.	Represent a number on a number line as being between two consecutive multiples of 10; 100; 1,000; or 10,000 and use words to describe relative size of numbers in order to round whole numbers. **Beta** Appendix B: Number Line Lesson 04: Rounding to 10 and Estimation Lesson 11: Rounding to Hundreds; Multiple-Digit Addition with Regrouping Lesson 17: Rounding to Thousands; Estimation **Gamma** Lesson 22: Rounding to 10, 100, and 1,000; Estimation

GRADE LEVEL EXPECTATION	111.5.b.2.D.	Compare and order whole numbers up to 100,000 and represent comparisons using the symbols >, <, or =. **Beta** Lesson 02: Sequencing; Word Problem Tips Lesson 03: Inequalities
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STUDENT EXPECTATION	**111.5.b.3.**	**Number and operations. The student applies mathematical process standards to represent and explain fractional units. The student is expected to:**
GRADE LEVEL EXPECTATION	111.5.b.3.A.	Represent fractions greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 using concrete objects and pictorial models, including strip diagrams and number lines. **Beta** Appendix A: Identify Shapes; Fractional Parts
GRADE LEVEL EXPECTATION	111.5.b.3.C.	Explain that the unit fraction 1/b represents the quantity formed by one part of a whole that has been partitioned into b equal parts where b is a non-zero whole number. **Gamma** Lesson 01: Rectangles, Factors, and Products
GRADE LEVEL EXPECTATION	111.5.b.3.D.	Compose and decompose a fraction a/b with a numerator greater than zero and less than or equal to b as a sum of parts 1/b. **Gamma** Lesson 01: Rectangles, Factors, and Products
TEKS	**111.5.**	**Grade 3, Adopted 2012.**
STUDENT EXPECTATION	**111.5.b.4.**	**Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy. The student is expected to:**
GRADE LEVEL EXPECTATION	111.5.b.4.A.	Solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction. **Beta** Lesson 13: Column Addition
GRADE LEVEL EXPECTATION	111.5.b.4.B.	Round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems. **Beta** Lesson 04: Rounding to 10 and Estimation Lesson 11: Rounding to Hundreds; Multiple-Digit Addition with Regrouping Lesson 17: Rounding to Thousands; Estimation **Gamma** Lesson 22: Rounding to 10, 100, and 1,000; Estimation

GRADE LEVEL EXPECTATION	111.5.b.4.C.	Determine the value of a collection of coins and bills. **Beta** Lesson 08: Skip Count by 10; 1 Penny = 1¢, 1 Dime = 10¢ Lesson 09: Skip Count by 5; 5¢ = 1 Nickel Lesson 10: Money: Decimal Point and Dollars Lesson 12: Adding Money; Mental Math **Gamma** Lesson 05: Multiply by 10; 10¢ = 1 Dime Lesson 06: Multiply by 5; 5¢ = 1 Nickel Lesson 26: Finding Factors; 25¢ = 1 Quarter
GRADE LEVEL EXPECTATION	111.5.b.4.D.	Determine the total number of objects when equally-sized groups of objects are combined or arranged in arrays up to 10 by 10. **Gamma** Lesson 07: Area of a Rectangle and a Square
GRADE LEVEL EXPECTATION	111.5.b.4.E.	Represent multiplication facts by using a variety of approaches such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line, and skip counting. **Gamma** Lesson 04: Multiply by 2; 1 Quart = 2 Pints Lesson 05: Multiply by 10; 10¢ = 1 Dime Lesson 06: Multiply by 5; 5¢ = 1 Nickel Lesson 07: Area of a Rectangle and a Square Lesson 10: Multiply by 9 Lesson 12: Multiply by 3; 3 Feet = 1 Yard, 1 Tablespoon = 3 Teaspoons Lesson 14: Multiply by 6 Lesson 16: Multiply by 4; 4 Quarters = 1 Dollar Lesson 18: Multiply by 7 and by Multiples of 100 Lesson 20: Multiply by 8 Lesson 23: Double-Digit Times Double-Digit; Multiplication by 11 Lesson 29: Prime and Composite Numbers; Multiply by 12
GRADE LEVEL EXPECTATION	111.5.b.4.F.	Recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts. **Gamma** Lesson 05: Multiply by 10; 10¢ = 1 Dime Lesson 06: Multiply by 5; 5¢ = 1 Nickel Lesson 10: Multiply by 9 Lesson 12: Multiply by 3; 3 Feet = 1 Yard, 1 Tablespoon = 3 Teaspoons Lesson 14: Multiply by 6 Lesson 16: Multiply by 4; 4 Quarters = 1 Dollar Lesson 18: Multiply by 7 and by Multiples of 100 Lesson 20: Multiply by 8 Lesson 23: Double-Digit Times Double-Digit; Multiplication by 11 Lesson 24: Double-Digit with Regrouping; Associative Property; Mental Math Lesson 25: Multiple-Digit Multiplication; Regrouping Lesson 28: More Multiple-Digit Multiplication Lesson 29: Prime and Composite Numbers; Multiply by 12
GRADE LEVEL EXPECTATION	111.5.b.4.I.	Determine if a number is even or odd using divisibility rules. **Beta** Lesson 06: Skip Count by 2

GRADE LEVEL EXPECTATION	111.5.b.4.K.	Solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts. **Gamma** Lesson 04: Multiply by 2; 1 Quart = 2 Pints Lesson 05: Multiply by 10; 10¢ = 1 Dime Lesson 06: Multiply by 5; 5¢ = 1 Nickel Lesson 10: Multiply by 9 Lesson 12: Multiply by 3; 3 Feet = 1 Yard, 1 Tablespoon = 3 Teaspoons Lesson 14: Multiply by 6 Lesson 16: Multiply by 4; 4 Quarters = 1 Dollar Lesson 18: Multiply by 7 and by Multiples of 100 Lesson 20: Multiply by 8 Lesson 23: Double-Digit Times Double-Digit; Multiplication by 11 Lesson 24: Double-Digit with Regrouping; Associative Property; Mental Math Lesson 25: Multiple-Digit Multiplication; Regrouping Lesson 28: More Multiple-Digit Multiplication Lesson 29: Prime and Composite Numbers; Multiply by 12
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STUDENT EXPECTATION	**111.5.b.5.**	**Algebraic reasoning. The student applies mathematical process standards to analyze and create patterns and relationships. The student is expected to:**
GRADE LEVEL EXPECTATION	111.5.b.5.A.	Represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations. **Beta** Appendix B: Number Line Lesson 12: Adding Money; Mental Math Lesson 21: Telling Time: Minutes; Mental Math
TEKS	**111.5.**	**Grade 3, Adopted 2012.**
STUDENT EXPECTATION	**111.5.b.6.**	**Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional geometric figures to develop generalizations about their properties. The student is expected to:**
GRADE LEVEL EXPECTATION	111.5.b.6.A.	Classify and sort two- and three-dimensional solids, including cones, cylinders, spheres, triangular and rectangular prisms, and cubes, based on attributes using formal geometric language. **Beta** Appendix A: Identify Shapes; Fractional Parts **Gamma** Lesson 01: Rectangles, Factors, and Products
GRADE LEVEL EXPECTATION	111.5.b.6.C.	Determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row. **Gamma** Lesson 07: Area of a Rectangle and a Square

GRADE LEVEL EXPECTATION	111.5.b.6.E.	Decompose two congruent two-dimensional figures into parts with equal areas and express the area of each part as a unit fraction of the whole and recognize that equal shares of identical wholes need not have the same shape. **Beta** Appendix A: Identify Shapes; Fractional Parts **Gamma** Appendix A: More on Fractions Lesson 09: Skip Count by 9; Equivalent Fractions Lesson 13: Skip Count by 6; Equivalent Fractions
TEKS	**111.5.**	**Grade 3, Adopted 2012.**
STUDENT EXPECTATION	**111.5.b.7.**	**Geometry and measurement. The student applies mathematical process standards to select appropriate units, strategies, and tools to solve problems involving customary and metric measurement. The student is expected to:**
GRADE LEVEL EXPECTATION	111.5.b.7.B.	Determine the perimeter of a polygon or a missing length when given perimeter and remaining side lengths in problems. **Beta** Lesson 15: Perimeter
GRADE LEVEL EXPECTATION	111.5.b.7.D.	Determine when it is appropriate to use measurements of liquid volume (capacity) or weight. **Gamma** Lesson 15: Skip Count by 4; 4 Quarts = 1 Gallon Lesson 19: Skip Count by 8; 8 Pints = 1 Gallon Lesson 27: Place Value Through Millions; 16 Ounces = 1 Pound
GRADE LEVEL EXPECTATION	111.5.b.7.E.	Determine liquid volume (capacity) or weight using appropriate units and tools. **Gamma** Lesson 27: Place Value Through Millions; 16 Ounces = 1 Pound
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STUDENT EXPECTATION	**111.5.b.8.**	**Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. The student is expected to:**
GRADE LEVEL EXPECTATION	111.5.b.8.A.	Summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals. **Beta** Lesson 30: Bar Graphs and Line Graphs