10-1 Patterns with Multiples of 10

I can explain and apply place value, patterns, and basic facts to multiply by multiples of 10.

Numbers & Operation in Base Ten: Use place value understanding and properties of operations to perform multi-digit arithmetic.

3.NBT.A.3: Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.

10-2 More Multiplication Patterns

I can recognize and describe patterns in the multiplication fact table.

Operations & Algebraic Thinking: Solve problems involving the four operations, and identify and explain patterns in arithmetic.

3.OA.D.9: Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.

10-3 Understand the Associative Property

I can use the associative property to prove that changing the grouping of three numbers doesn't change the product.

Operations & Algebraic Thinking: Understand properties of multiplication and the relationship between multiplication and division.

3.OA.B.5: Apply properties of operations as strategies to multiply and divide.

10-4 Two-Step Problems Involving Multiplication and Division

I can use equations and models to solve two-step word problems that involve multiplication and division.

Operations & Algebraic Thinking: Solve problems involving the four operations, and identify and explain patterns in arithmetic.

3.OA.D.8: Solve two-step word problems using the four operations. 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.

10-5 Solve Two-Step Problems

I can solve two-step word problems using all four operations and represent them with equations that include a letter for the unknown.

Operations & Algebraic Thinking: Solve problems involving the four operations, and identify and explain patterns in arithmetic.

3.OA.D.8: Solve two-step word problems using the four operations. 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.

10-6 Explain the Reasonableness of a Solution

I can decide whether an answer is reasonable by using tools like rounding, estimation, and mental math.

Operations & Algebraic Thinking: Solve problems involving the four operations, and identify and explain patterns in arithmetic.

3.OA.D.8: Solve two-step word problems using the four operations. 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.