3-1 Understand Equal Groups:

I understand and can model multiplication using equal groups.

Operations & Algebraic Thinking: Represent and solve problems involving multiplication and division.

3.OA.A.1 Common Core:

Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each.

3-2 Use Arrays to Multiply:

I understand and can model multiplication using arrays.

Operations & Algebraic Thinking: Represent and solve problems involving multiplication and division.

3.OA.A.1 Common Core:

Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each.

3-3 Understand the Commutative Property:

I understand that multiplication is commutative and can show that changing the order of numbers doesn't change the result.

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

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

3-4 Understand Equal Sharing:

I can represent division by showing how objects are shared equally among groups.

Operations & Algebraic Thinking: Represent and solve problems involving multiplication and division.

3.OA.A.2 Common Core: Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.

3-5 Understand Equal Grouping:

I can model division by dividing a total number of objects into equal groups.

Operations & Algebraic Thinking: Represent and solve problems involving multiplication and division.

3.OA.A.2 Common Core:

Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.

3-6 Relate Multiplication and Division:

I can show the relationship between multiplication and division using equal groups and array models.

Operations & Algebraic Thinking: Represent and solve problems involving multiplication and division.

3.OA.A.1 Common Core:

Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each.

3.OA.A.2 Common Core:

Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.

3-7 Find the Unknown:

I can demonstrate how to use a model to find an unknown number in a multiplication or division equation.

Operations & Algebraic Thinking: Represent and solve problems involving multiplication and division.

3.OA.A.4 Common Core: Determine the unknown whole number in a multiplication or division equation relating three whole numbers.