

# Grade 4 Smarter Balanced Assessment Item Specifications Fact Sheet

**Claim 1 - Target A:** Use the four operations with whole numbers to solve problems.

**Content Domain:** Operations and Algebraic Thinking

**Claim 1 Priority Cluster**

## Standards Assessed in Target A:

**4.OA.1:** Interpret a multiplication equation as a comparison, e.g., interpret  $35 = 5 \times 7$  as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.

**4.OA.2:** Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.

**4.OA.3:** Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. 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.

## Achievement Level Descriptors

<b>Level 1</b>	Students should be able to use the four operations (add, subtract, multiply, and divide) to solve one-step problems involving equal groups and arrays.
<b>Level 2</b>	Students should be able to use the four operations to solve one-step problems involving an unknown number. They should be able to realize that it is appropriate to multiply or divide in order to solve familiar multiplicative comparison problems.
<b>Level 3</b>	Students should be able to use the four operations (add, subtract, multiply, and divide) to solve one-step problems involving equal groups and arrays, including problems where the remainder must be interpreted. They should be able to find an unknown number and represent problems using equations with a symbol representing the unknown quantity.
<b>Level 4</b>	Students should be able to assess the reasonableness of answers using mental computation and estimation strategies, including rounding.

## Construct-Relevant Vocabulary

equation, difference, product, quotient, remainder, sum, times as many, times as much

## Allowable Stimulus Materials

Multiplication equations, verbal statements of multiplicative comparison, contextual problems involving multiplicative comparison, one-step contextual word problems, measurements limited to: kilometers (km), meters (m), centimeters (cm), kilograms (kg), grams (g), pounds (lb), ounces (oz), liters (L), milliliters (mL), hours (hr), minutes (min), seconds (s), money (whole number \$ or ¢ only), yards (yd), feet (ft), inches (in), gallons (gal), quarts (qt), pints (pt), cups