# Grade 3 Smarter Balanced Assessment Item Specifications Fact Sheet
**Claim 1 - Target D:** Solve problems involving the four operations, and identify and explain patterns in arithmetic.
**Content Domain:** Operations and Algebraic Thinking
<mark>Claim 1 Priority Cluster</mark>

## Standards Assessed in Target D:

**3.OA.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.

**3.OA.9:** Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*

## Achievement Level Descriptors

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| **Level 1** | Students should be able to represent and solve one-step problems using addition and subtraction within 100 and multiplication and division within 100. |
| **Level 2** | Students should be able to solve two-step problems using addition and subtraction with numbers larger than 100 and solutions within 1000, assess the reasonableness of an answer, and identify patterns in the addition table. |
| **Level 3** | Students should be able to solve two-step problems using multiplication and division within 100. They should be able to represent the problem using equations with a letter or symbol to represent an unknown quantity. They should also be able to explain patterns in the multiplication table. |
| **Level 4** | Students should be able to use the properties of operations to explain arithmetic patterns (including patterns in the addition and multiplication tables). |

## Construct-Relevant Vocabulary

add, addend, difference, divide, equation, estimate, estimation, factor, multiply, patterns, product, quotient, rounding, subtract, sum

## Allowable Stimulus Materials

addition tables, multiplication tables, number lines