



Proficiency Scale Grade 3

Domain: Standards for Mathematical Content
Strand: Operations and Algebraic Thinking (OA)
Benchmark Code: 3.SMC.OA.1

Standard: Represent and solve problems involving multiplication and division. (DOK 2)

Score 4.0	<p>In addition to a score 3.0 performance, the student demonstrates in-depth inferences and/or application of knowledge.</p> <p>Examples include, but are not limited to:</p> <ul style="list-style-type: none"> ● Represent and solve multi-step word problems involving multiplication and division with products and quotients within 100. ● Represent and solve problems involving multiplication and division with products and quotients larger than 100. 	
	<i>Score 3.5</i>	<i>In addition to a score 3.0 performance, partial success at score 4.0 content</i>
Score 3.0	<p>Target goals:</p> <ul style="list-style-type: none"> ● Represent and solve problems involving multiplication with products within 100. ● Represent and solve problems involving division with quotients within 100. 	
	<i>Score 2.5</i>	<i>No major errors or omissions regarding score 2.0 content and partial success at score 3.0 content</i>
Score 2.0	<p>Simpler goals:</p> <ul style="list-style-type: none"> ● Recognize and recall specific vocabulary, such as: <ul style="list-style-type: none"> ○ factor, product, dividend, divisor, quotient, equal groups, inverse. ● Use manipulatives (e.g., counters, pictures) to aid in solving problems involving multiplication and division. ● Use repeated addition or repeated subtraction to solve problems involving multiplication and division. 	
	<i>Score 1.5</i>	<i>Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content</i>
Score 1.0	With help, partial success at score 2.0 content and score 3.0 content	
	<i>Score 0.5</i>	<i>With help, partial success at score 2.0 content but not at score 3.0 content</i>
Score 0.0	Even with help, no success	



Proficiency Scale Grade 3

Domain: Standards for Mathematical Content
Strand: Operations and Algebraic Thinking (OA)
Benchmark Code: 3.SMC.OA.2

Standard: Understand properties of multiplication and the relationship between multiplication and division. (DOK 2)

Score 4.0	<p>In addition to a score 3.0 performance, the student demonstrates in-depth inferences and/or application of knowledge.</p> <p>Examples include, but are not limited to:</p> <ul style="list-style-type: none"> ● Use the inverse operation to check for accuracy when solving multi-step problems involving multiplication and division. 	
<i>Score 3.5</i>	<i>In addition to a score 3.0 performance, partial success at score 4.0 content</i>	
Score 3.0	<p>Target goals:</p> <ul style="list-style-type: none"> ● Use properties of multiplication to solve problems. ● Describe the relationship between multiplication and division. 	
<i>Score 2.5</i>	<i>No major errors or omissions regarding score 2.0 content and partial success at score 3.0 content</i>	
Score 2.0	<p>Simpler goals:</p> <ul style="list-style-type: none"> ● Recognize and recall the properties of multiplication, such as: <ul style="list-style-type: none"> ○ commutative, associative, identity, and zero. ● Recognize the relationship between repeated addition and multiplication. ● Recognize the relationship between repeated subtraction and division. 	
<i>Score 1.5</i>	<i>Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content</i>	
Score 1.0	With help, partial success at score 2.0 content and score 3.0 content	
<i>Score 0.5</i>	<i>With help, partial success at score 2.0 content but not at score 3.0 content</i>	
Score 0.0	Even with help, no success	



Proficiency Scale Grade 3

Domain: Standards for Mathematical Content
Strand: Operations and Algebraic Thinking (OA)
Benchmark Code: 3.SMC.OA.4

Standard: Solve problems involving the four operations, and identify and explain patterns in arithmetic. (DOK 3)

Score 4.0	<p>In addition to a score 3.0 performance, the student demonstrates in-depth inferences and/or application of knowledge.</p> <p>Examples include, but are not limited to:</p> <ul style="list-style-type: none"> ● Solve multi-step problems involving two or more operations. ● Extend patterns in arithmetic (e.g., determine the rule in a given table, extend the pattern using the rule). 	
	<i>Score 3.5</i>	<i>In addition to a score 3.0 performance, partial success at score 4.0 content</i>
Score 3.0	<p>Target goals:</p> <ul style="list-style-type: none"> ● Solve two-step word problems involving multiplication and division. ● Describe the patterns in an addition or multiplication table by using properties of operations. ● Represent two-step word problems using equations with a letter standing for the unknown quantity (e.g., $200 + x + 5 = 275$, what is the value of x?). 	
	<i>Score 2.5</i>	<i>No major errors or omissions regarding score 2.0 content and partial success at score 3.0 content</i>
Score 2.0	<p>Simpler goals:</p> <ul style="list-style-type: none"> ● Recognize and recall specific vocabulary, such as: <ul style="list-style-type: none"> ○ factor, product, addend, sum, difference, divisor, dividend, and quotient. ● Recognize phrases that correspond with operations, such as: <ul style="list-style-type: none"> ○ how many more, in all, and in each group. ● Solve two-step word problems involving addition and subtraction. ● Identify patterns in arithmetic found in an addition or multiplication table. 	
	<i>Score 1.5</i>	<i>Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content</i>
Score 1.0	With help, partial success at score 2.0 content and score 3.0 content	
	<i>Score 0.5</i>	<i>With help, partial success at score 2.0 content but not at score 3.0 content</i>
Score 0.0	Even with help, no success	



Proficiency Scale Grade 3

Domain: Standards for Mathematical Content
Strand: Number and Operations in Base Ten (NBT)
Benchmark Code: 3.SMC.NBT.1

Standard: Use place value understanding and properties of operations to perform multi-digit arithmetic. (DOK 2)

Score 4.0	<p>In addition to a score 3.0 performance, the student demonstrates in-depth inferences and/or application of knowledge.</p> <p>Examples include, but are not limited to:</p> <ul style="list-style-type: none"> ● Use parentheses to group values when solving multi-digit arithmetic involving more than one operation. ● Use understanding of rounding to round whole numbers to the nearest 1,000 and beyond. 	
	<i>Score 3.5</i>	<i>In addition to a score 3.0 performance, partial success at score 4.0 content</i>
Score 3.0	<p>Target goals:</p> <ul style="list-style-type: none"> ● Use place value understanding to perform multi-digit arithmetic. ● Use properties of operations to perform multi-digit arithmetic. 	
	<i>Score 2.5</i>	<i>No major errors or omissions regarding score 2.0 content and partial success at score 3.0 content</i>
Score 2.0	<p>Simpler goals:</p> <ul style="list-style-type: none"> ● Recognize and recall specific vocabulary, such as: <ul style="list-style-type: none"> ○ ones place, tens place, hundreds place. ● Use strategies and algorithms to fluently add and subtract numbers up to 100. ● Use place value to compare and order whole numbers. ● Use strategies based on place value and properties of operations to multiply one-digit whole numbers by multiples of 10 in the range 10-90. ● Round whole numbers to the nearest 10 or 100. 	
	<i>Score 1.5</i>	<i>Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content</i>
Score 1.0	With help, partial success at score 2.0 content and score 3.0 content	
	<i>Score 0.5</i>	<i>With help, partial success at score 2.0 content but not at score 3.0 content</i>
Score 0.0	Even with help, no success	



Proficiency Scale Grade 3

Domain: Standards for Mathematical Content
Strand: Number and Operations- Fractions (NF)
Benchmark Code: 3.SMC.NF.1

Standard: Develop understanding of fractions as numbers. (DOK 2)

Score 4.0	<p>In addition to a score 3.0 performance, the student demonstrates in-depth inferences and/or application of knowledge.</p> <p>Examples include, but are not limited to:</p> <ul style="list-style-type: none"> ● Compare fractions, improper fractions, or mixed numbers with unlike denominators. 	
	<i>Score 3.5</i>	<i>In addition to a score 3.0 performance, partial success at score 4.0 content</i>
Score 3.0	<p>Target goals:</p> <ul style="list-style-type: none"> ● Relate fractions to whole numbers. ● Identify two fractions as equivalent if they are the same size or at the same point on a number line. ● Compare the size of two fractions with the same numerator or denominator using >, <, or =. ● Express whole numbers as fractions. 	
	<i>Score 2.5</i>	<i>No major errors or omissions regarding score 2.0 content and partial success at score 3.0 content</i>
Score 2.0	<p>Simpler goals:</p> <ul style="list-style-type: none"> ● Recognize and recall specific vocabulary, such as: <ul style="list-style-type: none"> ○ part, whole, numerator, denominator, mixed number, improper fraction, equivalent, unit fraction. ● Show that a fraction $\frac{1}{b}$ is equal to 1 part when a whole is partitioned into b equal parts. ● Compare the size of two whole numbers using >, <, or =. ● Explain two and four equal shares of shapes as fractions (halves, thirds, and quarters) of the shape. 	
	<i>Score 1.5</i>	<i>Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content</i>
Score 1.0	With help, partial success at score 2.0 content and score 3.0 content	
	<i>Score 0.5</i>	<i>With help, partial success at score 2.0 content but not at score 3.0 content</i>
Score 0.0	Even with help, no success	



Proficiency Scale Grade 3

Domain: Standards for Mathematical Content

Strand: Measurement and Data (MD)

Benchmark Code: 3.SMC.MD.1

Standard: Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. (DOK 2)

Score 4.0	<p>In addition to a score 3.0 performance, the student demonstrates in-depth inferences and/or application of knowledge.</p> <p>Examples include, but are not limited to:</p> <ul style="list-style-type: none"> ● Solve multi-step word problems involving masses or volumes that are given in the same units. ● Solve multi-step word problems involving addition and subtraction of time intervals in minutes. 	
	<i>Score 3.5</i>	<i>In addition to a score 3.0 performance, partial success at score 4.0 content</i>
Score 3.0	<p>Target goals:</p> <ul style="list-style-type: none"> ● Solve one-step word problems involving masses or volumes that are given in the same units. ● Solve one-step word problems involving addition and subtraction of time intervals in minutes. ● Measure liquid volumes and masses of objects using standard units. 	
	<i>Score 2.5</i>	<i>No major errors or omissions regarding score 2.0 content and partial success at score 3.0 content</i>
Score 2.0	<p>Simpler goals:</p> <ul style="list-style-type: none"> ● Recognize and recall specific vocabulary, such as: <ul style="list-style-type: none"> ○ mass, capacity, minute, elapsed time, grams, liters. ● Tell and write time to the nearest minute. ● Measure time intervals in minutes. ● Estimate liquid volumes and masses of objects using standard units. 	
	<i>Score 1.5</i>	<i>Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content</i>
Score 1.0	With help, partial success at score 2.0 content and score 3.0 content	
	<i>Score 0.5</i>	<i>With help, partial success at score 2.0 content but not at score 3.0 content</i>
Score 0.0	Even with help, no success	



Proficiency Scale Grade 3

Domain: Standards for Mathematical Content
Strand: Measurement and Data (MD)
Benchmark Code: 3.SMC.MD.2
Standard: Represent and interpret data. (DOK 3)

Score 4.0	<p>In addition to a score 3.0 performance, the student demonstrates in-depth inferences and/or application of knowledge.</p> <p>Examples include, but are not limited to:</p> <ul style="list-style-type: none"> ● Create questions that can be used to gather data. ● Collect, represent, and analyze data gathered from a question or survey. 	
	<i>Score 3.5</i>	<i>In addition to a score 3.0 performance, partial success at score 4.0 content</i>
Score 3.0	<p>Target goals:</p> <ul style="list-style-type: none"> ● Draw a scaled picture graph to represent a data set with several categories. ● Draw a scaled bar graph to represent a data set with several categories. ● Make a line plot using lengths, measured by a ruler, where the horizontal scale is marked off in appropriate units. ● Solve one- and two-step <i>how many more</i> and <i>how many less</i> problems using information presented in scaled bar graphs. 	
	<i>Score 2.5</i>	<i>No major errors or omissions regarding score 2.0 content and partial success at score 3.0 content</i>
Score 2.0	<p>Simpler goals:</p> <ul style="list-style-type: none"> ● Recognize and recall specific vocabulary, such as: <ul style="list-style-type: none"> ○ picture graph, bar graph, line plot, key. ● Measure lengths using rulers marked with halves and fourths of an inch. 	
	<i>Score 1.5</i>	<i>Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content</i>
Score 1.0	With help, partial success at score 2.0 content and score 3.0 content	
	<i>Score 0.5</i>	<i>With help, partial success at score 2.0 content but not at score 3.0 content</i>
Score 0.0	Even with help, no success	



Proficiency Scale Grade 3

Domain: Standards for Mathematical Content
Strand: Measurement and Data (MD)
Benchmark Code: 3.SMC.MD.3

Standard: Understand concepts of area and relate area to multiplication and to addition. (DOK 2)

Score 4.0	<p>In addition to a score 3.0 performance, the student demonstrates in-depth inferences and/or application of knowledge.</p> <p>Examples include, but are not limited to:</p> <ul style="list-style-type: none"> ● Work backwards to determine the value of the unknown when presented with an unknown dimension and a given area. ● Calculate the area of irregular plane figures (with all right angles) by breaking apart the figure into smaller, regular shapes. ● Show that the area of rectangles is additive by adding the areas of two non-overlapping rectangles. 	
<i>Score 3.5</i>	<i>In addition to a score 3.0 performance, partial success at score 4.0 content</i>	
Score 3.0	<p>Target goals:</p> <ul style="list-style-type: none"> ● Calculate the area of regular plane figures by counting the number of square units. ● Calculate the area of regular plane figures using the formula $A = L \times W$. ● Compare and contrast the measurements of perimeter and area. 	
<i>Score 2.5</i>	<i>No major errors or omissions regarding score 2.0 content and partial success at score 3.0 content</i>	
Score 2.0	<p>Simpler goals:</p> <ul style="list-style-type: none"> ● Recognize and recall specific vocabulary, such as: <ul style="list-style-type: none"> ○ area, formula, length, width, dimensions, units, right angle and square units. ● Use models to represent the distributive property in finding the area of a rectangle with whole number side lengths. 	
<i>Score 1.5</i>	<i>Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content</i>	
Score 1.0	With help, partial success at score 2.0 content and score 3.0 content	
<i>Score 0.5</i>	<i>With help, partial success at score 2.0 content but not at score 3.0 content</i>	
Score 0.0	Even with help, no success	



Proficiency Scale Grade 3

Domain: Standards for Mathematical Content

Strand: Measurement and Data (MD)

Benchmark Code: 3.SMC.MD.4

Standard: Recognize perimeter as an attribute of plane figures and distinguish between linear and area measures. (DOK 2)

Score 4.0	<p>In addition to a score 3.0 performance, the student demonstrates in-depth inferences and/or application of knowledge. Examples include, but are not limited to:</p> <ul style="list-style-type: none"> ● Work backwards to determine the length of the unknown side when presented with an unknown side length and a given perimeter. 	
<i>Score 3.5</i>	<i>In addition to a score 3.0 performance, partial success at score 4.0 content</i>	
Score 3.0	<p>Target goals:</p> <ul style="list-style-type: none"> ● Calculate the perimeter of regular and irregular plane figures by adding the given side lengths. ● Use the formula $P = 2 \times L + 2 \times W$ to calculate the perimeter of regular plane figures. 	
<i>Score 2.5</i>	<i>No major errors or omissions regarding score 2.0 content and partial success at score 3.0 content</i>	
Score 2.0	<p>Simpler goals:</p> <ul style="list-style-type: none"> ● Recognize and recall specific vocabulary, such as: <ul style="list-style-type: none"> ○ perimeter, formula, length, width, units, right angle. ● Recognize plane figures as two-dimensional figures. 	
<i>Score 1.5</i>	<i>Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content</i>	
Score 1.0	With help, partial success at score 2.0 content and score 3.0 content	
<i>Score 0.5</i>	<i>With help, partial success at score 2.0 content but not at score 3.0 content</i>	
Score 0.0	Even with help, no success	



Proficiency Scale Grade 3

Domain: Standards for Mathematical Content

Strand: Geometry (G)

Benchmark Code: 3.SMC.G.1

Standard: Reason with shapes and their attributes. (DOK 2)

Score 4.0	<p>In addition to a score 3.0 performance, the student demonstrates in-depth inferences and/or application of knowledge.</p> <p>Examples include, but are not limited to:</p> <ul style="list-style-type: none"> ● Determine the name of an irregular polygon with right angles based on its attributes. 	
	<i>Score 3.5</i>	<i>In addition to a score 3.0 performance, partial success at score 4.0 content</i>
Score 3.0	<p>Target goals:</p> <ul style="list-style-type: none"> ● Determine whether a quadrilateral is a trapezoid, parallelogram, rhombus, rectangle, or square based on its attributes. ● Partition shapes into parts with equal areas. ● Express the area of equally partitioned parts as a unit fraction of the whole. 	
	<i>Score 2.5</i>	<i>No major errors or omissions regarding score 2.0 content and partial success at score 3.0 content</i>
Score 2.0	<p>Simpler goals:</p> <ul style="list-style-type: none"> ● Recognize and recall specific vocabulary, such as: <ul style="list-style-type: none"> ○ polygon, concave, convex, side, vertex, and angle. ● Recognize and recall specific polygons (e.g., triangle, quadrilateral, pentagon, hexagon, octagon, and decagon). ● Determine whether or not a figure is a polygon based on its attributes (closed figure, made up of line segments). ● Draw examples of quadrilaterals that are not rhombuses, rectangles, and squares. 	
	<i>Score 1.5</i>	<i>Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content</i>
Score 1.0	With help, partial success at score 2.0 content and score 3.0 content	
	<i>Score 0.5</i>	<i>With help, partial success at score 2.0 content but not at score 3.0 content</i>
Score 0.0	Even with help, no success	