

BENCHMARK REPORT

MATHEMATICS GRADE 3



DOMAIN: Standards for Mathematical Content		
Status:	OCS Code:	Strand: <i>Operations and Algebraic Thinking (OA)</i>
	3.SMC.OA.1	Represent and solve problems involving multiplication and division.
Supporting	3.SMC.OA.1.1.a	Interpret products of whole numbers
Supporting	3.SMC.OA.1.2.a	Interpret whole-number quotients of whole numbers
Focus	3.SMC.OA.1.3-1.b	Use multiplication and division with numbers up to 100 to solve word problems in situations involving equal groups
Supporting	3.SMC.OA.1.3-2.b	Use multiplication and division with numbers up to 100 to solve word problems in situations involving arrays
Supporting	3.SMC.OA.1.3-3.b	Use multiplication and division with numbers up to 100 to solve word problems in situations involving measurement quantities
Focus	3.SMC.OA.1.4.b	Determine the unknown whole number in a multiplication or division equation relating three whole numbers
	3.SMC.OA.2	Understand properties of multiplication and the relationship between multiplication and division.
Supporting	3.SMC.OA.2.1.c	Multiply and divide using properties of operations
Supporting	3.SMC.OA.2.2.b	Show that division is the multiplication of the dividend and divisor of a number
	3.SMC.OA.3	Multiply and divide within 100.
Focus	3.SMC.OA.3.1.b	Multiply and divide numbers up to 100 fluently
	3.SMC.OA.4	Solve problems involving the four operations, and identify and explain patterns in arithmetic.
Focus	3.SMC.OA.4.1-1.c	Solve two-step word problems using the four operations
Supporting	3.SMC.OA.4.1-2.c	Represent two-step word problems using equations with a letter standing for the unknown quantity
Focus	3.SMC.OA.4.1-3.c	Assess the reasonableness of an answer after solving a two-step word problems using the four operations
Focus	3.SMC.OA.4.2-1.c	Identify arithmetic patterns found in an addition or multiplication table
Focus	3.SMC.OA.4.2-2.c	Explain arithmetic patterns found in an addition or multiplication table by using properties of operations
Status:	OCS Code:	Strand: <i>Number and Operations in Base Ten (NBT)</i>
	3.SMC.NBT.1	Use place value understanding and properties of operations to perform multi-digit arithmetic.
Focus	3.SMC.NBT.1.1.a	Use place value understanding to round whole numbers to the nearest 10 or 100
Focus	3.SMC.NBT.1.2.a	Use strategies and algorithms to fluently add and subtract numbers up to 1000
Supporting	3.SMC.NBT.1.3.b	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
Status:	OCS Code:	Strand: <i>Number and Operations - Fractions (NF)</i>
	3.SMC.NF.1	Develop understanding of fractions as numbers.
Focus	3.SMC.NF.1.1-1.a	Show that a fraction $1/b$ is equal to the quantity formed by 1 part when a whole is partitioned into b equal parts
Supporting	3.SMC.NF.1.1-2.a	Show that a fraction a/b is equal to the quantity formed by a parts of size $1/b$
Focus	3.SMC.NF.1.2-1.b	Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts
Supporting	3.SMC.NF.1.2-2.b	Demonstrate that each part on a number line diagram has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$
Supporting	3.SMC.NF.1.2-3.b	Represent a fraction a/b on a number line diagram by marking off " a " lengths $1/b$ from 0
Supporting	3.SMC.NF.1.2-4.b	Explain that an interval on a number line diagram has size a/b and that its endpoint locates the number a/b on the number line
Supporting	3.SMC.NF.1.3-1.b	Identify two fractions as equivalent if they are the same size or the same point on a number line
Supporting	3.SMC.NF.1.3-2.c	Generate simple equivalent fractions
Focus	3.SMC.NF.1.3-3.c	Use a fraction model to explain why fractions are equivalent
Supporting	3.SMC.NF.1.3-4.b	Relate fractions to whole numbers
Supporting	3.SMC.NF.1.3-5.c	Express whole numbers as fractions
Supporting	3.SMC.NF.1.3-6.c	Compare the size of two fractions with the same numerator or denominator
Supporting	3.SMC.NF.1.3-7.c	Explain why comparisons are valid only when two fractions with the same numerator or denominator refer to the same whole

BENCHMARK REPORT

MATHEMATICS GRADE 3



Supporting	3.SMC.NF.1.3-8.c	Record the results of comparisons of two fractions with the same numerator or denominator with the symbols $>$, $=$, and $<$
Supporting	3.SMC.NF.1.3-9.c	Use a fraction model to justify conclusions based on comparisons of fractions with the same numerator or denominator
Status:	OCS Code:	Strand: <i>Measurement and Data (MD)</i>
	3.SMC.MD.1	Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
Supporting	3.SMC.MD.1.1-1.a	Tell time to the nearest minute
Supporting	3.SMC.MD.1.1-2.a	Write time to the nearest minute
Supporting	3.SMC.MD.1.1-3.a	Measure time intervals in minutes
Focus	3.SMC.MD.1.1-4.b	Solve word problems involving addition and subtraction of time intervals in minutes
Supporting	3.SMC.MD.1.2-1.b	Measure liquid volumes and masses of objects using standard units
Supporting	3.SMC.MD.1.2-2.b	Estimate liquid volumes and masses of objects using standard units
Focus	3.SMC.MD.1.2-3.c	Solve one-step word problems involving masses or volumes that are given in the same units
	3.SMC.MD.2	Represent and interpret data.
Focus	3.SMC.MD.2.1-1.c	Draw a scaled picture graph to represent a data set with several categories
Supporting	3.SMC.MD.2.1-2.c	Draw a scaled bar graph to represent a data set with several categories
Focus	3.SMC.MD.2.1-3.c	Solve one and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs
Supporting	3.SMC.MD.2.2-1.a	Measure lengths using rulers marked with halves and fourths of an inch
Supporting	3.SMC.MD.2.2-2.c	Make a line plot using lengths, measured by a ruler, where the horizontal scale is marked off in appropriate units
	3.SMC.MD.3	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.
Supporting	3.SMC.MD.3.1-1.a	Relate area to attributes of plane figures
Supporting	3.SMC.MD.3.1-2.a	Identify concepts of area measurement
Supporting	3.SMC.MD.3.2.a	Measure areas by counting unit squares
Supporting	3.SMC.MD.3.3-1.a	Find the area of a rectangle with whole-number side lengths
Supporting	3.SMC.MD.3.3-2.b	Compare methods of finding the area of a rectangle
Supporting	3.SMC.MD.3.3-3.b	Solve real world and mathematical problems by multiplying side lengths to find areas of rectangles with whole number side lengths
Supporting	3.SMC.MD.3.3-4.c	Show that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$
Supporting	3.SMC.MD.3.3-5.c	Use models to represent the distributive property in finding the area of a rectangle with whole-number side lengths
Supporting	3.SMC.MD.3.3-6.c	Decompose the area of rectilinear figures into non-overlapping rectangles
Supporting	3.SMC.MD.3.3-7.c	Show that the area of rectangles is additive
Supporting	3.SMC.MD.3.3-8.c	Add the areas of non-overlapping rectangular parts
Focus	3.SMC.MD.3.3-9.c	Solve real world problems by adding the areas of non-overlapping rectangular parts
	3.SMC.MD.4	Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
Focus	3.SMC.MD.4.1-1.c	Solve real world and mathematical problems calculating perimeters of polygons
Supporting	3.SMC.MD.4.1-2.c	Solve real world and mathematical problems by exhibiting rectangles with the same perimeter and different areas
Supporting	3.SMC.MD.4.1-3.c	Solve real world and mathematical problems by exhibiting rectangles with the same area and different perimeters
Status:	OCS Code:	Strand: <i>Geometry (G)</i>
	3.SMC.G.1	Reason with shapes and their attributes.
Focus	3.SMC.G.1.1-1.b	Recognize that shapes in different categories may share attributes, and that the shared attributes can define a larger category
Focus	3.SMC.G.1.1-2.b	Identify examples of quadrilaterals including rhombuses, rectangles, and squares
Supporting	3.SMC.G.1.1-3.b	Draw examples of quadrilaterals that are not rhombuses, rectangles, and squares
Focus	3.SMC.G.1.2-1.c	Partition shapes into parts with equal areas
Supporting	3.SMC.G.1.2-2.c	Express the area of equally partitioned parts as a unit fraction of the whole
DOMAIN: Standards for Mathematical Practices		

BENCHMARK REPORT

MATHEMATICS GRADE 3



Status:	OCS Code:	Strand: <i>Solve Problems (MP1)</i>
	3.SMP.1	1. Make sense of problems and persevere in solving them.
Supporting	3.SMP.1.c	Make sense of problems and persevere in solving them
Status:	OCS Code:	Strand: <i>Reason (MP2)</i>
	3.SMP.2	2. Reason abstractly and quantitatively.
Focus	3.SMP.2.c	Reason abstractly and quantitatively
Status:	OCS Code:	Strand: <i>Construct Arguments (MP3)</i>
	3.SMP.3	3. Construct viable arguments and critique the reasoning of others.
Supporting	3.SMP.3.c	Construct viable arguments and critique the reasoning of others
Status:	OCS Code:	Strand: <i>Model (MP4)</i>
	3.SMP.4	4. Model with mathematics.
Supporting	3.SMP.4.c	Model with mathematics
Status:	OCS Code:	Strand: <i>Use Tools (MP5)</i>
	3.SMP.5	5. Use appropriate tools strategically.
Focus	3.SMP.5.c	Use appropriate tools strategically
Status:	OCS Code:	Strand: <i>Attend to Precision (MP6)</i>
	3.SMP.6	6. Attend to precision.
Focus	3.SMP.6.c	Attend to precision
Status:	OCS Code:	Strand: <i>Use Structure (MP7)</i>
	3.SMP.7	7. Look for and make use of structure.
Supporting	3.SMP.7.c	Look for and make use of structure
Status:	OCS Code:	Strand: <i>Express Regularity (MP8)</i>
	3.SMP.8	8. Look for and express regularity in repeated reasoning.
Supporting	3.SMP.8.c	Look for and express regularity in repeated reasoning