

Grade 3 Math Summative Assessment Blueprints

Reporting Category	Approximate Reporting Category Percentages	Cluster	Standards
Operations and Algebraic Thinking	25%	3.OA.A Represent and solve problems involving multiplication and division.	3.OA.1 3.OA.2 3.OA.3 3.OA.4
		3.OA.B Understand properties of multiplication and the relationship between multiplication and division.	3.OA.5 3.OA.6
		3.OA.C Multiply and divide within 100.	3.OA.7
		3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.	3.OA.8 3.OA.9
Numbers and Operations in Base Ten	10%	3.NBT.A Use place value understanding and properties of operations to perform multi-digit arithmetic.	3.NBT.1 3.NBT.2 3.NBT.3
Numbers and Operations - Fractions	25%	3.NF.A Developing understanding of fractions as numbers.	3.NF.1 3.NF.2 (a-b) 3.NF.3 (a-d)
Measurement and Data	30%	3.MD.A Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	3.MD.1 3.MD.2
		3. MD.B Represent and Interpret Data	3.MD.3 3.MD.4
		3.MD.C Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	3.MD.5 (a-b) 3.MD.6 3.MD.7 (a-d)
		3.MD.C Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.	3.MD.8
Geometry	10%	3.G.A Reason with shapes and their attributes.	3.G.1 3.G.2

Grade 4 Math Summative Assessment Blueprints

Reporting Category	Approximate Reporting Category Percentages	Cluster	Standards
Operations and Algebraic Thinking	20%	4.OA.A Use the four operations with whole numbers to solve problems.	4.OA.1 4.OA.2 4.OA.3
		4.OA.B Gain familiarity with factors and multiples.	4.OA.4
		4.OA.C Generate and analyze patterns.	4.OA.5
Numbers and Operations in Base Ten	20%	4.NBT.A Generalize place value understanding for multi-digit whole numbers.	4.NBT.1 4.NBT.2 4.NBT.3
		4.NBT.B Use place value understanding and properties of operations to perform multi-digit arithmetic.	4.NBT.4 4.NBT.5 4.NBT.6
Numbers and Operations - Fractions	30%	4.NF.A Extend understanding of fraction equivalence and ordering.	4.NF.1 4.NF.2
		4.NF.B Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	4.NF.3 (a-d) 4.NF.4 (a-c)
		4.NF.C Understand decimal notation for fractions, and compare decimal fractions.	4.NF.5 4.NF.6 4.NF.7
Measurement and Data	20%	4.MD.A Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	4.MD.1 4.MD.2 4.MD.3
		4.MD.B Represent and interpret data.	4.MD.4
		4.MD.C Geometric Measurement: understand concepts of angle and measure angles.	4.MD.5 (a-b) 4.MD.6 4.MD.7
Geometry	10%	4.G.A Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	4.G.1 4.G.2 4.G.3

Grade 5 Math Summative Assessment Blueprints

Reporting Category	Approximate Reporting Category Percentages	Cluster	Standards
Operations and Algebraic Thinking	10%	5.OA.A Write and interpret numerical expressions.	5.OA.1 5.OA.2
		5.OA.B Analyze patterns and relationships.	5.OA.3
Numbers and Operations in Base Ten	25%	5.NBT.A Understand the place value system.	5.NBT.1 5.NBT.2 5.NBT.3 (a-b) 5.NBT.4
		5.NBT.B Perform operations with multi-digit whole numbers and with decimals to hundredths.	5.NBT.5 5.NBT.6 5.NBT.7
Numbers and Operations - Fractions	30%	5.NF.A Use equivalent fractions as a strategy to add and subtract fractions.	5.NF.1 5.NF.2
		5.NF.B Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	5.NF.3 5.NF.4 (a-b) 5.NF.5 (a-b) 5.NF.6 5.NF.7 (a-c)
Measurement and Data	20%	5.MD.A Convert like measurement units within a given measurement system.	5.MD.1
		5.MD.B Represent and interpret data.	5.MD.2
		5.MD.C Geometric Measurement: understand concepts of volume and relate volume to multiplication and division.	5.MD.3 (a-b) 5.MD.4 5.MD.5 (a-c)
Geometry	15%	5.G.A Graph points on the coordinate plane to solve real-world and mathematical problems.	5.G.1 5.G.2
		5.G.B Classify two-dimensional figures into categories based on their properties.	5.G.3 5.G.4

Grade 6 Math Summative Assessment Blueprints

Reporting Category	Approximate Reporting Category Percentages	Cluster	Standards
Ratios and Proportional Relationships	15%	6.RP.A Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.1 6.RP.2 6.RP.3 (a-d)
The Number System	30%	6.NS.A Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	6.NS.1
		6.NS.B Compute fluently with multi-digit numbers and find common factors and multiples.	6.NS.2 6.NS.3 6.NS.4
		6.NS.C Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.5 6.NS.6 (a-c) 6.NS.7 (a-d) 6.NS.8
Expressions and Equations	25%	6.EE.A Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.1 6.EE.2 (a-c) 6.EE.3 6.EE.4
		6.EE.B Reason about and solve one-variable equations and inequalities.	6.EE.5 6.EE.6 6.EE.7 6.EE.8
		6.EE.C Represent and analyze quantitative relationships between dependent and independent variables.	6.EE.9
Geometry	15%	6.G.A Solve real-world and mathematical problems involving area, surface area, and volume.	6.G.1 6.G.2 6.G.3 6.G.4
Statistics and Probability	15%	6.SP.A Develop understanding of statistical variability.	6.SP.1 6.SP.2 6.SP.3
		6.SP.B Summarize and describe distributions.	6.SP.4 6.SP.5 (a-d)

Grade 7 Math Summative Assessment Blueprints

Reporting Category	Approximate Reporting Category Percentages	Cluster	Standards
Ratios and Proportional Relationships	20%	7.RP.A Analyze proportional relationships and use them to solve real-world and mathematical problems.	7.RP.1 7.RP.2 (a-d) 7.RP.3
The Number System	20%	7.NS.A Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.1 (a-d) 7.NS.2 (a-d) 7.NS.3
Expressions and Equations	20%	7.EE.A Use properties of operations to generate equivalent expressions.	7.EE.1 7.EE.2
		7.EE.B Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	7.EE.3 7.EE.4 (a-b)
Geometry	20%	7.G.A Draw, construct, and describe geometrical figures and describe the relationships between them.	7.G.1 7.G.2 7.G.3
		7.G.B Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	7.G.4 7.G.5 7.G.6
Statistics and Probability	20%	7.SP.A Use random sampling to draw inferences about a population.	7.SP.1 7.SP.2
		7.SP.B Draw informal comparative inferences about two populations.	7.SP.3 7.SP.4
		7.SP.C Investigate chance processes and develop, use, and evaluate probability models.	7.SP.5 7.SP.6 7.SP.7 (a-b) 7.SP.8 (a-c)

Grade 8 Math Summative Assessment Blueprints

Reporting Category	Approximate Reporting Category Percentages	Cluster	Standards
Numbers, Expressions, and Equations	40%	8.NS.A Know that there are numbers that are not rational, and approximate them by rational numbers.	8.NS.1 8.NS.2
		8.EE.A Work with radicals and integer exponents.	8.EE.1 8.EE.2 8.EE.3 8.EE.4
		8.EE.B Understand the connections between proportional relationships, lines, and linear equations.	8.EE.5 8.EE.6
		8.EE.C Analyze and solve linear equations and pairs of simultaneous linear equations.	8.EE.7 (a-b) 8.EE.8 (a-c)
Functions	20%	8.F.A Define, evaluate, and compare functions.	8.F.1 8.F.2 8.F.3
		8.F.B Use functions to model relationships between quantities.	8.F.4 8.F.5
Geometry	25%	8.G.A Understand congruence and similarity using physical models, transparencies, or geometry software.	8.G.1 (a-c) 8.G.2 8.G.3 8.G.4 8.G.5
		8.G.B Understand and apply the Pythagorean Theorem.	8.G.6 8.G.7 8.G.8
		8.G.C Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.	8.G.9
Statistics and Probability	15%	8.SP.A Investigate patterns of association in bivariate data.	8.SP.1 8.SP.2 8.SP.3 8.SP.4

Grade 10 Math Summative Assessment Blueprints

Reporting Category	Approximate Reporting Category Percentages	Cluster	Standards
Number and Quantity	10%	N-RN The Real Number System	N.RN.1 N.RN.2 N.RN.3
		N-Q Quantities	N.Q.1 N.Q.2 N.Q.3
Algebra	25%	A-SSE Seeing Structure in Expressions	A.SSE.1 A.SSE.2 A.SSE.3a
		A-APR Arithmetic with Polynomials and Rational Expressions	A.APR.1
		A-CED Creating Equations	A.CED.1 A.CED.2 A.CED.3 A.CED.4
		A-REI Reasoning with Equations and Inequalities	A.REI.1 A.REI.3 A.REI.4b A.REI.5 A.REI.6 A.REI.7 A.REI.10 A.REI.11 A.REI.12
Functions	25%	F-IF Interpreting Functions	F.IF.1 F.IF.2 F.IF.3 F.IF.4 F.IF.5 F.IF.6 F.IF.7 (a, e) F.IF.8 (a) F.IF.9
		F-BF Building Functions	F.BF.1 (a-b) F.BF.2 F.BF.3

		F-LE Linear, Quadratic, and Exponential Models	F.LE.1 (a-b) F.LE.2 F.LE.3 F.LE.5
Geometry	30%	G-CO Congruence	G-CO.1 G-CO.2 G-CO.3 G-CO.4 G-CO.5 G-CO.6 G-CO.7 G-CO.8 G-CO.9 G-CO.10 G-CO.11 G-CO.12 G-CO.13
		G-SRT Similarity, Right Triangles, and Trigonometry	G.SRT.1 (a-b) G.SRT.2 G.SRT.3 G.SRT.4 G.SRT.5 G.SRT.6 G.SRT.7 G.SRT.8
		G-C Circles	G.C.1 G.C.2 G.C.3
		G-GPE Expressing Geometric Properties with Equations	G.GPE.1 G.GPE.4 G.GPE.5 G.GPE.6 G.GPE.7
		G-GMD Geometric Measurement and Dimension	G.GMD.3 G.GMD.4
Statistics and Probability	10%	S-ID Interpreting Categorical and Quantitative Data	S.ID.1 S.ID.2 S.ID.3 S.ID.5 S.ID.6 (a,c) S.ID.7
		S-CP Conditional Probability and the Rules of Probability	S.CP.1 S.CP.2 S.CP.4