



DOK	Min. - Max.	%
1	6-10	15%-25%
2	20-26	50%-65%
3	6-10	15%-25%

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Domain - Reporting Category
Benchmarks & Standard

3rd Grade Mathematics 2018+ WY-TOPP Summative Assessment Blueprint		Max # of Items Per Standard
Operations and Algebraic Thinking [15-17 Items; 38-43%]		
3.OA.1-4	A. Represent and solve problems involving multiplication and division.	8
3.OA.5-6	B. Understand properties of multiplication and the relationship between multiplication and division.	4
3.OA.7	C. Multiply and divide within 100.	2
3.OA.8-9	D. Solve problems involving the four operations, and identify and explain patterns in arithmetic.	4
Number and Operations - Fractions [7-9 Items; 18-23%]		
3.NF.1-3	F. Develop understanding of fractions as numbers.	9
Measurement and Data [8-10 Items; 20-25%]		
3.MD.3-4	H. Represent and interpret data.	6
3.MD.5-7	I. Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	6
3.MD.8	J. Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.	3
Geometry [6-8 Items; 15-20%]		
3.G.1-2	K. Reason with shapes and their attributes.	8
Total Items		40



DOK	Min. - Max.	%
1	7-11	15%-25%
2	23-29	50%-65%
3	7-11	15%-25%

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4th Grade Mathematics 2018+ WY-TOPP Summative Assessment Blueprint		Max # of Items Per Standard
Operations and Algebraic Thinking [8-10 Items; 18-22%]		
4.OA.1-3	A. Use the four operations with whole numbers to solve problems.	7
4.OA.4	B. Gain familiarity with factors and multiples.	4
Number and Operations - Base Ten [8-10 Items; 18-22%]		
4.NBT.1-3	D. Generalize place value understanding for multi-digit whole numbers.	7
4.NBT.4-6	E. Use place value understanding and properties of operations to perform multi-digit arithmetic.	5
Number and Operations - Fractions [13-14 Items; 29-31%]		
4.NF.1-2	F. Extend understanding of fraction equivalence and ordering.	6
4.NF.3-4	G. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	6
4.NF.5-7	H. Understand decimal notation for fractions, and compare decimal fractions.	9
Measurement and Data [8-10 Items; 18-22%]		
4.MD.1-3	I. Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	6
4.MD.4	J. Represent and interpret data.	2
4.MD.5-7	K. Geometric measurement: understand concepts of angle and measure angles.	6
Geometry [6-8 Items; 13-18%]		
4.G.1-3	L. Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	8
Total Items		45



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2	23-29	50%-65%
3	7-11	15%-25%

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5th Grade Mathematics 2018+ WY-TOPP Summative Assessment Blueprint		Max # of Items Per Standard
Operations and Algebraic Thinking [6-8 Items; 13-18%]		
5.OA.1-2	A. Write and interpret numerical expressions.	8
Number and Operations - Base Ten [11-13 Items; 24-29%]		
5.NBT.1-4	C. Understand the place value system.	9
5.NBT.5-7	D. Perform operations with multi-digit whole numbers and with decimals to hundredths.	9
Number and Operations - Fractions [11-13 Items; 24-29%]		
5.NF.1-2	E. Use equivalent fractions as a strategy to add and subtract fractions.	6
5.NF.3-7	F. Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	10
Measurement and Data [7-9 Items; 16-20%]		
5.MD.1	G. Convert like measurement units within a given measurement system.	3
5.MD.2	H. Represent and interpret data.	3
5.MD.3-5	I. Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	5
Geometry [6-8 Items; 13-18%]		
5.G.1-2	J. Graph points on the coordinate plane to solve real-world and mathematical problems.	5
5.G.3-4	K. Classify two-dimensional figures into categories based on their properties.	4
Total Items		45



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3	7-11	15%-25%

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6th Grade Mathematics 2018+ WY-TOPP Summative Assessment Blueprint		Max # of Items Per Standard
Ratios and Proportional Relationships [7-9 Items; 16-20%] Non-Calculator Section		
6.RP.1-3	A. Understand ratio concepts and use ratio reasoning to solve problems.	9
The Number System [8-10 Items; 18-22%] Non-Calculator Section		
6.NS.1	B. Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	3
6.NS.2-4	C. Compute fluently with multi-digit numbers and find common factors.	6
6.NS.8	D. Apply and extend previous understandings of numbers to the system of rational numbers.	3
Expressions and Equations [11-14 Items; 24-31%] Non-Calculator Section		
6.EE.1-4	E. Apply and extend previous understandings of arithmetic to algebraic expressions.	7
6.EE.5-8	F. Reason about and solve one-variable equations and inequalities.	8
6.EE.9	G. Represent and analyze quantitative relationships between dependent and independent variables.	2
Geometry [7-9 Items; 16-20%] Calculator Section		
6.G.1-4	H. Solve real-world and mathematical problems involving area, surface area, and volume.	9
Statistics and Probability [7-8 Items; 16-18%] Calculator Section		
6.SP.1-3	I. Develop understanding of statistical variability.	5
6.SP.4-5	J. Summarize and describe distributions.	4
Note:	Grade 6 has a non-calculator and a calculator section on the test.	Total Items
		45



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7th Grade Mathematics 2018+ WY-TOPP Summative Assessment Blueprint		Max # of Items Per Standard
Ratios and Proportional Relationships [8-10 Items; 18-22%]		
7.RP.1-3	A. Analyze proportional relationships and use them to solve real-world and mathematical problems.	10
The Number System [7-8 Items; 16-18%]		
7.NS.1-3	B. Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	8
Expressions and Equations [9-11 Items; 20-24%]		
7.EE.1-2	C. Use properties of operations to generate equivalent expressions.	8
7.EE.3-4	D. Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	8
Geometry [8-10 Items; 18-22%]		
7.G.1-3	E. Draw, construct, and describe geometrical figures and describe the relationships between them.	7
7.G.4-6	F. Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	9
Statistics and Probability [7-9 Items; 16-20%]		
7.SP.1-2	G. Use random sampling to draw inferences about a population.	6
7.SP.3-4	H. Draw informal comparative inferences about two populations.	6
Total Items		45



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8th Grade Mathematics 2018+ WY-TOPP Summative Assessment Blueprint		Max # of Items Per Standard
Expressions and Equations [12-15 Items; 27-33%]		
8.EE.5-6	C. Understand the connections between proportional relationships, lines, and linear equations.	10
8.EE.7-8	D. Analyze and solve linear equations and pairs of simultaneous linear equations.	10
Functions [10-12 Items; 22-27%]		
8.F.1-3	E. Define, evaluate, and compare functions.	9
8.F.4-5	F. Use functions to model relationships between quantities.	6
Geometry [10-13 Items; 22-29%]		
8.G.1-5	G. Understand congruence and similarity using physical models, transparencies, or geometry software.	8
8.G.6-8	H. Understand and apply the Pythagorean Theorem.	6
8.G.9	I. Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.	2
Statistics and Probability [7-8 Items; 16-18%]		
8.SP.1-4	J. Investigate patterns of association in bivariate data.	8
Total Items		45



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9th Grade Mathematics 2018+ WY-TOPP Summative Assessment Blueprint		Max # of Items Per Standard
Numbers and Quantities 6-8 Items; 15-20%		
The Real Number System [8 Items Max]		
N.RN.1-2	A. Extend the properties of exponents to rational exponents.	8
N.RN.3	B. Use properties of rational and irrational numbers.	4
Algebra [12-15 Items; 30-38%]		
Seeing Structure and Expressions [9 Items Max]		
A.SSE.1	A. Interpret the structure of expressions.	6
A.SSE.3	B. Write expressions in equivalent forms to solve problems.	3
Creating Equations [2 Items Max]		
A.CED.1	G. Create equations that describe numbers or relationships.	2
Reasoning with Equations and Inequalities [9 Items Max]		
A.REI.1	H. Understand solving equations as a process of reasoning and explain the reasoning.	3
A.REI.3	I. Solve equations and inequalities in one variable.	3
A.REI.5-6	J. Solve systems of equations.	6
Functions [13-16 Items; 33-40%]		
Interpreting Functions [12 Items Max]		
F.IF.1-3	A. Understand the concept of a function and use function notation.	9
F.IF.4-6	B. Interpret functions that arise in applications in terms of the context.	9
F.IF.7a	C. Analyze functions using different representations.	3
Building Functions [3 Items Max]		
F.BF.1a	D. Build a function that models a relationship between two quantities.	3
Linear, Quadratic, and Exponential [3 Items Max]		
F.LE.1c	F. Construct and compare linear, quadratic, and exponential models and solve problems.	3
Statistics and Probability [6-7 Items; 15-18%]		
Interpreting Categorical and Quantitative Data [7 Items Max]		
S.ID.1-2	A. Summarize, represent, and interpret data on a single count or measurement variable.	6
S.ID.9	C. Interpret linear models.	3
Total Items		40



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10th Grade Mathematics 2018+ WY-TOPP Summative Assessment Blueprint		Max # of Items Per Standard
Geometry [40 Items; 100%]		
Congruence [13-15 Items; 33-38%]		
G.CO.1-5	A. Experiment with transformations in the plane.	8
G.CO.6-8	B. Understand congruence in terms of rigid motions.	5
G.CO.9-11	C. Prove geometric theorems.	5
G.CO.12-13	D. Make geometric constructions.	3
Similarity, Right Triangles, Trigonometry, and Circles [9-11 Items; 23-28%]		
G.SRT.1-3	E. Understand similarity in terms of similarity transformations.	6
G.SRT.4-5	F. Prove theorems involving similarity.	3
G.SRT.6 & 8	G. Define trigonometric ratios and solve problems involving right triangles.	4
G.C.1-2	I. Understand and apply theorems about circles.	4
Expressing Geometric Properties with Equations [8-10 Items; 20-25%]		
G.GPE.1	K. Translate between the geometric description and the equation for a conic section.	3
G.GPE.4-7	L. Use coordinates to prove simple geometric theorems algebraically.	8
Geometric Measurement and Dimension & Modeling [8-10 Items; 20-25%]		
G.GMD.1 & 3	M. Explain volume formulas and use them to solve problems.	4
G.GMD.4	N. Visualize relationships between two-dimensional and three-dimensional objects.	2
G.MG.1-3	O. Apply geometric concepts in modeling situations.	6
Total Items		40