MCAP Grade 6 Mathematics

High Level Blueprint

This High-Level Blueprint describes the structure and content of the Maryland Comprehensive Assessment Program (MCAP) Grade 6 Mathematics Assessment by subclaim.

Content Subclaim

The MCAP Grade 6 assessment contains 23 operational items designed to elicit evidence to support the Content Subclaim. Content Subclaim items are worth 1-point, are machine scored, and align to the Grade 6 evidence statements. Refer to the MCAP Grade 6 Evidence Statement document for more information on the content evidence statements.

Domain	Cluster		Number of Items
Ratios and Proportional Relationships	6.RP.A	Understand ratio concepts and use ratio reasoning to solve problems.	3
The Number System	6.NS.A	Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	8
	6.NS.B	Compute fluently with multi-digit numbers and find common factors and multiples.	
	6.NS.C	Apply and extend previous understandings for numbers to the system of rational numbers.	
Expressions and Equations	6.EE.A	Apply and extend previous understandings of arithmetic to algebraic expressions.	8
	6.EE.B	Reason about and solve one-variable equations and inequalities.	
	6.EE.C	Represent and analyze quantitative relationships between dependent and independent variables.	
Geometry	6.G.A	Solve real-world and mathematical problems involving area, surface area, and volume.	2
Statistics and Probability	6.SP.A	Develop understanding of statistical variability.	2
	6.SP.B	Summarize and describe distributions.	
Total Number of Operational Items			**23**
Total Number of Points			**23**

Reasoning Subclaim

The MCAP Grade 6 assessments include 6 operational items that elicit evidence to support the Reasoning Subclaim. Each assessment includes machine-scored and human-scored (constructed response) reasoning items. The content focus for all reasoning items is based on the content clusters. Refer to the MCAP Grade 6 Evidence Statements document for more information on the reasoning evidence statements.

Evidence Statements		Number of Machine-Scored Items (1 point)	Number of Constructed Response Items (3 or 4 points)
6.R.1	Reasoning with Ratios and Proportional Relationships	4	1 3-point item
6.R.2	Reasoning with Number Systems		and
6.R.3	Reasoning with Expressions and Equations		1 4-point item
	Total Number of Points	**4**	**7**

Modeling Subclaim

The MCAP Grade 6 assessments include 6 operational items that elicit evidence to support the Modeling Subclaim. Each assessment includes machine-scored and human-scored (constructed response) modeling items. Modeling items may address any of the Grade 6 evidence statements. Refer to the MCAP Grade 6 Evidence Statement document for more information on the modeling evidence statements.

Evidence Statements		Number of Machine-Scored Items (1 point)	Number of Constructed Response Items (3 or 4 points)
6.M.1	Choose and produce appropriate mathematics to model quantities and mathematical relationships in order to analyze situations, make predictions, solve multi-step problems, and draw conclusions.	4	1 3-point item and 1 4-point item
6. M.1a	Given a real-world situation, identify the problem that needs to be solved, make necessary assumptions, and identify important information.		
6.M.1b	Given real-world situation, formulate a mathematical representation of the problem.		
6.M.1c	Given a real-world situation, use mathematical models to compute and draw conclusions.		
6.M.1d	Given a real-world situation, interpret what a solution means within the context of the situation.		
6.M.1e	Given a real-world situation, evaluate and/or validate a partial or complete solution.		
	Total Number of Points	**4**	**7**