MCAP Grade 5 Mathematics

High Level Blueprint

This High-Level Blueprint describes the structure and content of the Maryland Comprehensive Assessment Program (MCAP) Grade 5 Mathematics Assessment by subclaim.

Content SubClaim

The MCAP Grade 5 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 5 evidence statements. Refer to the MCAP Grade 5 Evidence Statement document for more information on the content evidence statements.

Domain	Cluster		Number of Items
Operations and Algebraic Thinking	5.OA.A	Write and interpret numerical expression.	2
	5.OA.B	Analyze patterns and relationships.	
Number and Operations in Base Ten	5.NBT.A	Understand the place value system.	6
	5.NBT.B	Perform operations with multi-digit whole numbers and write decimals to hundredths.	
Number and Operations-Fractions	5.NF.A	Use equivalent fractions as a strategy to add and subtract fractions.	9
	5.NF.B	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	
Measurement	5.MD.A	Convert like measurement units within a given measurement system.	4
	5.MD.B	Represent and interpret data.	
	5.MD.C	Geometric measurement: Understand concepts of volume and relate volume to multiplication and division.	
Geometry	5.G.A	Graph points on the coordinate plane to solve real-world and mathematical problems.	2
	5.G.B	Classify two-dimensional figures into categories based on their properties.	
Total Number of Operational Items			**23**
Total Number of Points			**23**

Reasoning SubClaim

The MCAP Grade 5 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. Reasoning items may address any of the Grade 5 evidence statements. Refer to the MCAP Grade 5 Evidence Statement 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)
5.R.1	Base reasoning or explanations using a given pictorial representation and explain how the pictorial model represents a mathematical concept, or how it can be used to justify or refute a statement (with or without flaws) or how it can be used to generalize.	4	1 3-point item and 1 4-point item
5.R.2	Identify flawed thinking/reasoning and explain how to correct the thinking or work.		
5.R.3	Prove or disprove a statement, conjecture or generalization, using correct and precise mathematical examples.		
5.R.4	Reason mathematically to create a correct and precise solution to a real-world problem and be able to explain why the answer is mathematically correct.		
Total Number of Points		**4**	**7**

Modeling SubClaim

The MCAP Grade 5 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 5 evidence statements. Refer to the MCAP Grade 5 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)
5.M.1-1	Determine the problem that needs to be solved in a real-world situation.	4	1 3-point item and 1 4-point item
5. M.1-2	Determine the information that is needed to solve a problem in a given real-world situation.		
5.M.1-3	Identify the mathematics that is needed to create a solution path for a real-world situation.		
5.M.1-4	Create a solution path that represents the mathematics needed to solve a real-world situation.		
5.M.1-5	Evaluate a partial or complete solution to a real-world situation.		
Total Number of Points		**4**	**7**