MCAP Grade 3 Mathematics

High Level Blueprint

This High-Level Blueprint describes the structure and content of the Maryland Comprehensive Assessment Program (MCAP) Grade 3 Mathematics Assessment by subclaim.

Content Subclaim

The MCAP Grade 3 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 3 evidence statements. Refer to the MCAP Grade 3 Evidence Statement document for more information on the content evidence statements.

Domain	Cluster		Number of Items
Operations and Algebraic Thinking	3.OA.A	Represent and solve problems involving multiplication and division.	7
	3.OA.B	Understand properties of multiplication and the relationship between multiplication and division.	
	3.OA.C	Multiply and divide within 100.	
	3.OA.D	Solve problems involving the four operations, and identify and explain patterns in arithmetic.	
Number and Operations in Base Ten	3.NBT.A	Use place value understanding and properties of operations to perform multi-digit arithmetic.	2
Number and Operations-Fractions	3.NF.A	Develop understanding of fractions as numbers.	7
Measurement	3.MD.A	Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	5
	3.MD.B	Represent and interpret data.	
	3.MD.C	Geometric measurement: Understand concepts of area and relate areas to multiplication and addition.	
	3.MD. D	Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.	
Geometry	3.G.A	Reason with shapes and their attributes.	2
Total Number of Operational Items			**23**
Total Number of Points			**23**

Reasoning Subclaim

The MCAP Grade 3 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 3 evidence statements. Refer to the MCAP Grade 3 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 points)
3.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	2
3.R.2　Identify flawed thinking/reasoning and explain how to correct the thinking or work.		
3.R.3　Prove or disprove a statement, conjecture or generalization, using correct and precise mathematical examples.		
3.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**	**6**

Modeling Subclaim

The MCAP Grade 3 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 3 evidence statements. Refer to the MCAP Grade 3 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 points)
3.M.1-1　Determine the problem that needs to be solved in a real-world situation.	4	2
3. M.1-2　Determine the information that is needed to solve a problem in a given real-world situation.		
3.M.1-3　Identify the mathematics that is needed to create a solution path for a real-world situation.		
3.M.1-4　Create a solution path that represents the mathematics needed to solve a real-world situation.		
3.M.1-5　Evaluate a partial or complete solution to a real-world situation.		
Total Number of Points	**4**	**6**