

## **Mathematics Summative Assessment Blueprint**

As of 4/21/14

Target Sampling Mathematics Grade 5											
Claim	Content Category	Asse ssment Targets	DOK	Items		Total					
				САТ	РТ	Items					
1. Concepts and Procedures	Priority Cluster	E. Use equivalent fractions as a strategy to add and subtract fractions.	1, 2		0	15					
		I. Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	1, 2	6							
		F. Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	1, 2	5							
		D. Perform operations with multi-digit whole numbers and with decimals to hundredths.	1, 2	4							
		C. Understand the place value system.	1, 2								
	Supporting Cluster	J. Graph points on the coordinate plane to solve real-world and mathematical problems.	1	2	0	5					
		K. Classify two-dimensional figures into categories based on their properties.	2								
		A. Write and interpret numerical expressions.	1								
		B. Analyze patterns and relationships.	2								
		G. Convert like measurement units within a given measurement system.	1								
		H. Represent and interpret data.	1, 2								
2. Problem Solving 4. Modeling and Data Analysis	Problem Solving (drawn across content domains)	A. Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace.	2, 3	1	1–2	3–4					
		<ul> <li>B. Select and use appropriate tools strategically.</li> <li>C. Interpret results in the context of a situation.</li> <li>D. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).</li> </ul>	1, 2, 3								

- DOK: Depth of Knowledge, consistent with the Smarter Balanced Content Specifications.

-- The CAT algorithm will be configured to ensure the following:

For Claim 1, each student will receive at least 7 CAT items at DOK 2 or higher.

For combined Claims 2 and 4, each student will receive at least 2 CAT items at DOK 3 or higher.

For Claim 3, each student will receive at least 2 CAT items at DOK 3 or higher.



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Target Sampling Mathematics Grade 5											
Claim	Content Category	Asse ssment Targets	DOK	Items		Total					
				САТ	РТ	ltems					
2. Problem Solving 4. Modeling and Data Analysis	Modeling and Data Analysis (drawn across content domains)	<ul><li>A. Apply mathematics to solve problems arising in everyday life, society, and the workplace.</li><li>D. Interpret results in the context of a situation.</li></ul>	2, 3	1							
		<ul> <li>B. Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem.</li> <li>E. Analyze the adequacy of and make improvements to an existing model or develop a mathematical model of a real phenomenon.</li> </ul>	2, 3, 4	1	2–3	5–6					
		<ul> <li>C. State logical assumptions being used.</li> <li>F. Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flow charts, or formulas).</li> </ul>	1, 2	1							
		G. Identify, analyze, and synthesize relevant external resources to pose or solve problems.	3, 4	0	1						
3. Communicating Reasoning	Communicating Reasoning (drawn across content domains)	<ul><li>A. Test propositions or conjectures with specific examples.</li><li>D. Use the technique of breaking an argument into cases.</li></ul>	2, 3	2	2	8					
		<ul> <li>B. Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures.</li> <li>E. Distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in the argument—explain what it is.</li> </ul>	2, 3, 4	2							
		<ul> <li>C. State logical assumptions being used.</li> <li>F. Base arguments on concrete referents such as objects, drawings, diagrams, and actions.</li> </ul>	2, 3	2							

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