***Which Standards Does the SBAC Assessment Measure?***

***Summary from SBAC Content Specifications***

**SBAC Alignment to Grade 4 Standards**

*KEY: Claim 1 is red, Claim 2 is blue, Claim 3 is purple, Claim 4 is green. Target letter follows the hyphen.*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Operations and Algebraic Thinking** | **SBAC Claim-Target** | **Number and Operations in Base Ten** | **SBAC Claim-Target** | **Number and Operations-Fractions** | **SBAC Claim-Target** | **Measurement and Data** | **SBAC Claim-Target** | **Geometry** | **SBAC Claim-Target** |
| **OA.1** | **1-A****2-A thru D****4-A thru G** | **NBT.1** | **1-D** | **NF.1** | **1-F****2-A thru D****3-A thru F** | **MD.1** | **1-I****2-A thru D****4-A thru G** | **G.1** | **1-L** |
| **OA.2** | **1-A****2-A thru D****4-A thru G** | **NBT.2** | **1-D** | **NF.2** | **1-F****2-A thru D****3-A thru F** | **MD.2** | **1-I****2-A thru D****4-A thru G** | **G.2** | **1-L** |
| **OA.3** | **1-A****2-A thru D****3-A thru F****4-A thru G** | **NBT.3** | **1-D** | **NF.3** | **1-G****2-A thru D****3-A thru F****4-A thru G** | **MD.3** | **1-I****2-A thru D****4-A thru G** | **G.3** | **1-L** |
| **OA.4** | **1-B** | **NBT.4** | **1-E****2-A thru D** | **NF.4** | **1-G****2-A thru D****3-A thru F****4-A thru G** | **MD.4** | **1-J****4-A thru G** |  |  |
| **OA.5** | **1-C** | **NBT.5** | **1-E****2-A thru D****3-A thru F** | **NF.5** | **1-H****2-A thru D** | **MD.5** | **1-K****2-A thru D****4-A thru G** |  |  |
|  |  | **NBT.6** | **1-E****2-A thru D****3-A thru F** | **NF.6** | **1-H****2-A thru D** | **MD.6** | **1-K****2-A thru D****4-A thru G** |  |  |
|  |  |  |  | **NF.7** | **1-H****2-A thru D****3-A thru F** | **MD.7** | **1-K****2-A thru D****4-A thru G** |  |  |

**Smarter Balanced Claims for Math**

* **Claim 1:** **Concepts & Procedures –** Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency.
* **Claim 2: Problem Solving –** Students can solve a range of complex well-posed problems in pure and applied mathematics, making productive use of knowledge and problem solving strategies.
* **Claim 3: Communicating Reasoning –** Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.
* **Claim 4:** **Modeling and Data Analysis** – Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems.

**Smarter Balanced Claims & Targets for Math**

*“m” – denotes major*

*“a/s” denotes additional/supporting*

**Claim 1: Concepts & Procedures –** Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency.

* Target A [m]: Use the four operations with whole numbers to solve problems.
* Target B [a/s]: Gain familiarity with factors and multiples.
* Target C [a/s]: Generate and analyze patterns.
* Target D [m]: Generalize place value understanding for multi-digit whole numbers.
* Target E [m]: Use place value understanding and properties of operations to perform multi-digit arithmetic.
* Target F [m]: Extend understanding of fraction equivalence and ordering.
* Target G [m]: Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.
* Target H [m]: Understand decimal notation for fractions, and compare decimal fractions.
* Target I [a/s]: Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.
* Target J [a/s]: Represent and interpret data.
* Target K [a/s]: Geometric measurement: understand concepts of angle and measure angles.
* Target L [a/s]: Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

**Claim 2: Problem Solving –** Students can solve a range of complex well-posed problems in pure and applied mathematics, making productive use of knowledge and problem solving strategies.

* **Target A:** Apply mathematics to solve well-posed problems in pure mathematics and those arising in everyday life, society, and the workplace.
* **Target B:** Select and use appropriate tools strategically.
* **Target C:** Interpret results in the context of a situation.
* **Target D:** Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas).

**Claim 3: Communicating Reasoning –** Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.

* **Target A:** Test propositions or conjectures with specific examples.
* **Target B:** Construct, autonomously, 12 chains of reasoning that will justify or refute propositions or conjectures.
* **Target C:** State logical assumptions being used.
* **Target D:** Use the technique of breaking an argument into cases.
* **Target E:** Distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in the argument—explain what it is.
* **Target F:** Base arguments on concrete referents such as objects, drawings, diagrams, and actions.
* **Target G:** At later grades, determine conditions under which an argument does and does not apply. (For example, area increases with perimeter for squares, but not for all plane figures.)

**Claim 4:** **Modeling and Data Analysis** – Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems.

* **Target A:** Apply mathematics to solve problems arising in everyday life, society, and the workplace.
* **Target B:** Construct, autonomously, chains of reasoning to justify mathematical models used, interpretations made, and solutions proposed for a complex problem.
* **Target C:** State logical assumptions being used.
* **Target D:** Interpret results in the context of a situation.
* **Target E:** Analyze the adequacy of and make improvements to an existing model or develop a
* mathematical model of a real phenomenon.
* **Target F:** Identify important quantities in a practical situation and map their relationships (e.g., using diagrams, two-way tables, graphs, flowcharts, or formulas).
* **Target G:** Identify, analyze and synthesize relevant external resources to pose or solve problems.