Smarter Balanced Grade 3-6 (ELA and Math) CMT Grade 5 (Science) Assessment Results 2015-16

Beecher Road School Board of Education Meeting September 19, 2016

Smarter Balanced Assessment

Global measure of student learning:

- Accurately describes student achievement and growth
- Measures students' progress/attainment of knowledge and skills
- Provides an annual snapshot of student achievement
- Aligned to Common Core State Standards
- Administered to students in grades 3-8
- Utilizes computer adaptive testing
 - Includes one math performance task

Background Information on the Summative Assessment

English Language Arts

Areas of Knowledge and Skills Measured	Statement About Student Learning From Which the Assessment was Built
Reading	Students can read closely and analytically to comprehend a range of increasingly complex literary and informational texts.
Writing	Students can produce effective and well-grounded writing for a range of purposes and audiences.
Listening	Students can employ effective speaking and listening skills for a range of purposes and audiences.
Research/Inquiry	Students can engage in research/inquiry to investigate topics, and to analyze, integrate, and present information.

Sample question: ELA













Read the text. Then answer the questions.

New Homes for Hermit Crabs by Bart King

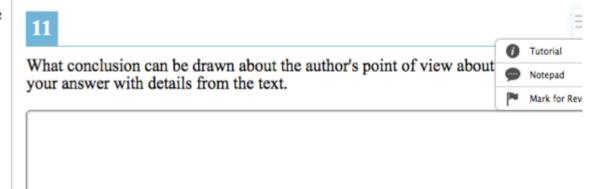
Hermit crabs are nature's recyclers. Like many other crabs, the hermit crab eats waste. By living on sea scraps, hermit crabs help keep oceans and shores clean. Some hermit crabs hide in reefs or live in shallow waters, while others scuttle on the ocean floor. There are also hermit crabs that spend most of their lives ashore.

Unlike other crabs, the hermit crab has a thin outer shell over its soft tail. This makes the hermit crab easy prey for hungry predators. Hermit crabs stay safe by living in old seashells. A hermit crab is picky; it tries on many shells until it finds one that fits just right. The hermit crab backs into its new home and uses its tail and rear legs to grab onto the shell and carry it. If a predator

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The author uses a word that means "fake" in the text. Click a word in the paragrap that **best** represents that idea.

These artificial shells have two important purposes. First, people who own hermit crabs can give them to their pets. That keeps real seashells in the ocean, rather that in home aquariums. The Project Shellter shells are also placed in the wild for hermit crabs to find. Lucky hermit crabs can move into these new dream homes at leave those plastic cups behind.



Background Information on the Summative Assessment

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Areas of Knowledge and Skills Measured	Statement About Student Learning From Which the Assessment was Built
Concepts and Procedures	Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency.
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.
Communicating Reasoning	Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.
Modeling and Data Analysis	Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems.

Sample question: Mathematics

Tyler is 8 years old. His sister Olivia is 4 years less than twice his age.

Write a numerical expression for Olivia's age.

1 2 3 + - × ÷

4 5 6 < = >

7 8 9 □ ()

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Achievement Levels

Four Achievement Levels:

- Level 1 = Does not meet the achievement standard
- Level 2 = Approaching the achievement standard
- Level 3 = Meets the achievement standard
- Level 4 = Exceeds the achievement standard

Achievement levels:

- ✓ Specify the knowledge and skills at a certain level
- ✓ Are less precise than scale scores
- ✓ Note: characterizing a student's achievement solely in terms of a level is an over simplification

The Results: ELA – All Students

Grade	Percent Scoring Level 3 and Above		Average Vertical Scale Score	
	2014-15	2015-16	2014-15	2015-16
3	63.0%	76.2%	2470	2482
4	74.4%	76.3%	2519	2527
5	75.4%	85.4%	2548	2582
6	79.8%	82.4%	2594	2597
All Grades	73.6%	80.1%	N/A	N/A

Scale Scores: English Language Arts

	English Language Arts/Literacy					
	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	
Level 4	2490-2623	2533-2663	2582-2701	2618-2724	2649-2745	
Level 3	2432-2489	2473-2532	2502-2581	2531–2617	2552-2648	
Level 2	2367–2431	2416-2472	2442-2501	2457–2530	2479–2551	
Level 1	2114–2366	2131-2415	2201–2441	2210–2456	2258–2478	

The Results: Mathematics - All Students

Grade	Percent Scoring Level 3 and Above		Average Vertical Scale Score	
	2014-15	2015-16	2014-15	2015-16
3	75.8%	75.2%	2474	2482
4	64.4%	65.6%	2513	2519
5	44.1%	71.9%	2519	2564
6	65.0%	71.4%	2596	2589
All Grades	61.1%	71.2%	N/A	N/A

Scale Scores: Mathematics

	Mathematics				
	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
Level 4	2501–2621	2549–2659	2579–2700	2610-2748	2635–2778
Level 3	2436–2500	2485–2548	2528–2578	2552-2609	2567–2634
Level 2	2381–2435	2411–2484	2455–2527	2473-2551	2484–2566
Level 1	2189–2380	2204–2410	2219–2454	2235–2472	2250–2483

Smarter Balanced Assessment: Overall results:

	2015	DRG	СТ	2016	DRG	СТ
ELA	73.6%	9 out of 21	30 out of 188	80.1%	5 out of 21	15 out of 188
Math	61.1%	12 out of 21	34 out of 188	71.2%	5 out of 21	17 out of 188

Future data reporting includes:

- Accountability report
- Participation rates
- High Needs students

Science CMT \rightarrow Grade 5 only:

- Measures core science concepts as well as scientific inquiry learned over several years.
- Topics assessed includes Life, Physical and Earth Science.
- Also assessed: Scientific Inquiry, Literacy and Numeracy.

Science CMT: Sample question

A student found a piece of metal. What could the student do to quickly determine if the metal might contain iron?

- O Heat the metal
- O Place the metal in water
- O Place the metal near a magnet*
- Weigh the metal

Sample inquiry question:

Some students did an experiment to find out which type of paper holds the most water. They repeated the experiment 3 times, counting the number of squares used. Their data are shown in the table below.

Number of Squares Needed to Absorb 25 Milliliters of Water

Type of Paper	Test 1	Test 2	Test 3
Paper Napkin	12 squares	13 squares	11 squares
Paper Towel	6 squares	5 squares	7 squares
Toilet Paper	10 squares	8 squares	6 squares
Tissue	10 squares	8 squares	9 squares

What should the students do next to answer their question?

- O Show all the numbers in a bar graph
- O Show all the numbers in a pie chart
- Find the average number of squares for each paper type*
- O Find the highest number of squares used in Test 1, 2, or 3

Science CMT results

	% at or above goal	Average Scale Score
2014-2015	81%	282
2015-2016	94%	307

Feedback:

An intermediate teacher shared: "Every year our students are more and more prepared; especially in math."

As told to a 6th grade teacher: "...the incoming students from Beecher have really impressed me. Many of them have come in with with very impressive skills in being able to find a central idea and provide evidence to support their claim."

Next Steps

- To ensure a guaranteed and viable 21st century curriculum
- Continued focus on high quality instructional delivery and practices
- Give students appropriate exposure and practice to the tools necessary to demonstrate knowledge
- Use of consultants and shared successful practices for continuous improvement
- Continued use of multiple measures to assess student achievement and growth

Thank you!