

# Assessment Materials Evaluation - Student Standards Review

Louisiana educators engaged in a professional review of the state’s academic standards for English language arts (ELA) and mathematics to ensure they continue to maintain strong expectations for teaching and learning aligned with college and workplace demands. The new ELA and math standards will be effective beginning with the 2016-2017 school year. As part of the Louisiana Department of Education’s support for a seamless transition to these new standards, the LDOE identified the major changes of the standards and their potential impact upon criteria used to review instructional materials.

Title: **Common Core Math Benchmark Assessments**

Grade: **Grade 9-12**

Publisher: **Measured Progress, Inc.**

Copyright: **2013**

Overall Rating: **Tier III, Not representing quality**

This Mathematics review has been examined for the following major shifts in alignment resulting from the Louisiana Student Standards Review:

- Include standards for money in grades K, 1, and 3 to ensure connections that provide smooth transitions from one grade to the next
- Provide developmentally appropriate content for all grades or courses while maintaining high expectations:
  - Additive area is moved to grade 4 from grade 3
  - The Statistics - Conditional Probability and the Rules of Probability (S-CP) domain is moved from Algebra II to Geometry
  - The standards provide extra clarity around the distinction between Algebra I and II

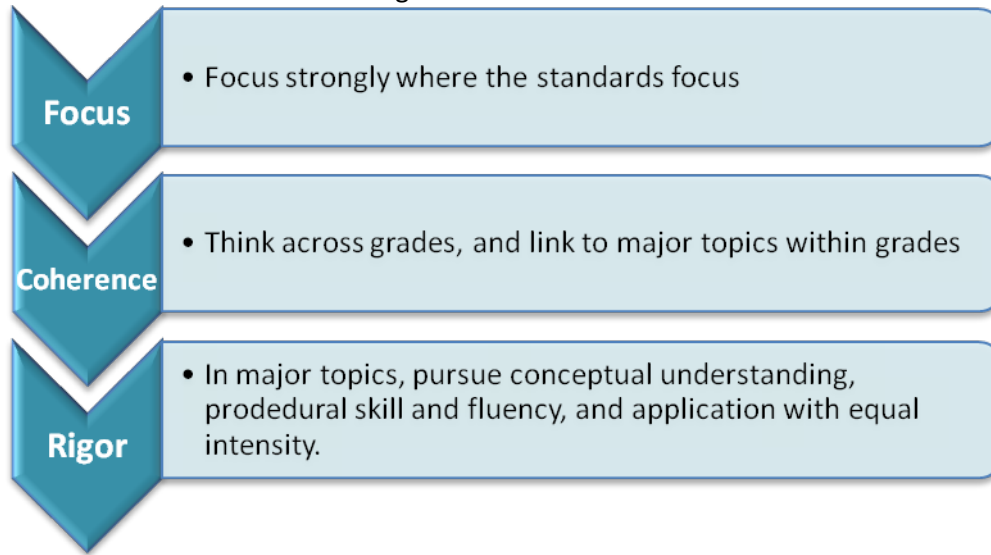
The following two indicators may be impacted:

- Focus on Major Work (Non-Negotiable)
- Focus in K-8 (Non-Negotiable)

**This review remains a Tier 3 rating.** As a result of these changes, the following chart identifies the potential impact on the current review. The LDOE recommends that district curriculum staff, principals, and teachers take these findings into consideration when using these benchmark assessments.

Criteria	Currently in the Rubric	Next Steps for Educators
Focus on Major Work (Non-Negotiable)	This program currently is reviewed as “Yes” for this criterion because the majority of points awarded in the assessments are given to content identified as widely applicable prerequisites as described by state standards.	Make sure to review all assessments to ensure that each meets or exceeds the expected score-point distributions for the major work of the grade.
Focus in K-8 (Non-Negotiable)	Not Applicable	Not Applicable

Strong mathematics instruction contains the following elements:



**Title:** Common Core Math Benchmark Assessments

**Grade:** Grade 9-12

**Publisher:** Measured Progress, Inc.

**Copyright:** 2013

**Overall Rating:** Tier III, Not representing quality

Tier I, Tier II, Tier III Elements of this review:

STRONG	WEAK
<u>Alignment of Test Items (Non-Negotiable)**</u>	<u>Rigor and Balance</u>
<u>Focus on Major Work (Non-Negotiable)</u>	<u>Practice-Content Connections</u>
<u>Assessing Supporting Content</u>	<u>Addressing Every Standard for Mathematical Practice</u>
<u>Constructing Forms Without Cueing Solution Processes*</u>	<u>Expressing Mathematical Reasoning</u>
<u>Calling for a Variety in Student Work</u>	
<u>Quality Materials</u>	
*weak at 9 <sup>th</sup> grade level ** weak at 11-12th grade levels	

Each set of submitted materials was evaluated for alignment with the standards beginning with a review of the indicators for the non-negotiable criteria. If those criteria were met, a review of the other criteria ensued.

**Tier 1 ratings** receive a “Yes” in Column 1 for Criteria 1 – 11.

**Tier 2 ratings** receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 3), a “Yes” in Column 1 for Criteria 4 in Section II, but at least one “No” in Section III.

**Tier 3 ratings** receive a “No” in Column 1 in Section II or Section III.

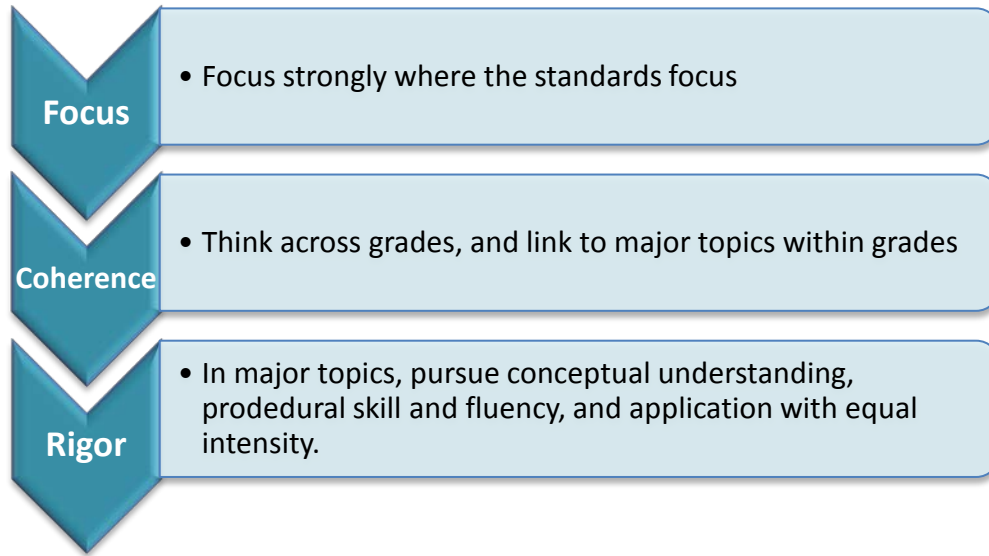
[Grade 9 \(Tier 3\)](#)

[Grade 10 \(Tier 3\)](#)

[Grade 11 \(Tier 3\)](#)

[Grade 12 \(Tier 3\)](#)

Strong mathematics instruction contains the following elements:



**Title:** Common Core Math Benchmark Assessment (Algebra 1)

**Grade:** 9

**Publisher:** Measured Progress, Inc.

**Copyright:** 2013

**Overall Rating:** Tier III, Not representing quality

**Tier I, Tier II, Tier III** Elements of this review:

STRONG	WEAK
<a href="#">Alignment of Test Items</a> (Non-Negotiable)	<a href="#">Rigor and Balance</a>
<a href="#">Focus on Major Work</a> (Non-Negotiable)	<a href="#">Practice-Content Connections</a>
<a href="#">Assessing Supporting Content</a>	<a href="#">Addressing Every Standard for Mathematical Practice</a>
<a href="#">Calling for a Variety in Student Work</a>	<a href="#">Expressing Mathematical Reasoning</a>
<a href="#">Quality Materials</a>	<a href="#">Constructing Forms Without Cueing Solution Processes</a>

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a “Yes” for all indicators in Column 2 for Section I, then the materials receive a “Yes” in Column 1. If there is a “No” for any indicator in Column 2 for Section I, then the materials receive a “No” in Column 1.

In Section II, if there is a “Yes” for all indicators in Column 2, then the materials receive a “Yes” in Column 1. If there is a “No” for any indicator in Column 2 for Section II, then the materials receive a “No” in Column 1.

For Section III, review each indicator individually.

**Tier 1 ratings** receive a “Yes” in Column 1 for Criteria 1– 11.

**Tier 2 ratings** receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1–3), a “Yes” in Column 1 for Criteria 4 in Section II, but at least one “No” in Section III.

**Tier 3 ratings** receive a “No” in Column 1 in Section II or Section III.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION I: NON-NEGOTIABLE CRITERIA</b>			
<p>Non-Negotiable 1. ALIGNMENT OF TEST ITEMS: 90% of test items and/or sets of items exhibit alignment to the full intent of the CCSSM for that grade or course<sup>12</sup> by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s).</p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. All items and/or sets of items should reflect the metric.</i></p> <p><input checked="" type="checkbox"/> Yes    <input type="checkbox"/> No</p>	<p><b>1a)</b> Items and/or sets of items directly reflect the language of individual standards.</p> <ul style="list-style-type: none"> <li>For example, 6.EE.3 puts the emphasis on applying properties of operations and generating equivalent expressions, not just mechanically simplifying.</li> <li>Most items aligned to a single standard should assess the central concern of the standard in question.</li> </ul>	Yes	<p>Most items and sets of items directly reflect the language of the individual standards. Most items address the central concern of the standard in questions. For example: HSA-SSE: Interpret the structure of expressions students are expect to rewrite expressions in their most simplified or factored form. There are some items that do not directly reflect the language of individual standards. For example, Form D item 17 which addresses HSN-RN.B.3 requires no explanation.</p>
	<p><b>1b)</b> Items and/or sets of items align with <a href="#">PARCC's evidence tables</a> for grades 3-8 and adhere to content limitations outlined in that document. All limitations for all grade K-HS provided in footnotes of the CCSSM are also followed. For example, in Grade 3 denominators for fractions are limited to 2, 3, 4, 6 and 8.</p>	N/A	
	<p><b>1c)</b> The overall set of items reflect the <a href="#">progressions</a> in the Standards.</p> <ul style="list-style-type: none"> <li>For example, multiplication and division items in grade 3 emphasize equal groups, with no rate problems (grade 6 in CCSS).</li> </ul>	Yes	<p>The overall set of items reflects the progressions in the standards.</p>
	<p><b>1d)</b> Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.</p>	Yes	<p>Within the complete set of items, items access all levels of content hierarchy as indicated in the high school CCSS. There are items that address individual standards and cluster headings. For example, Form B item 19 targets cluster HSN-Q.A.</p>

<sup>1</sup>Refer also to the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and the [High School Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>2</sup>See the [Quality Criteria Checklist for Mathematics](#).

	<p><b>1e)</b> Using the number system appropriate to the grade level. For example, in grade 3 there are some items involving fractions greater than 1; in the middle grades, arithmetic and algebra use the rational number system, not just the integers.</p>	<p><b>Yes</b></p>	<p>The number systems used are appropriate for the high school level. Students manipulate a variety of numbers within the real number system.</p>
--	--	-------------------	---

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION I (continued): NON-NEGOTIABLE CRITERIA</b>			
<p><b>Non-Negotiable 2. FOCUS ON MAJOR WORK*</b>: The large majority of points in each grade K–8 are devoted to the major work of the grade, and the majority of points in each High School course are devoted to widely applicable prerequisites.<sup>3</sup></p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p><input checked="" type="checkbox"/> Yes    <input type="checkbox"/> No</p> <p><b>*As applicable to the grade level assessment being reviewed.</b></p>	<p><b>FOR GRADES K–8 ONLY</b></p> <p><b>For grades K–8</b>, each grade/course’s assessments <b>meet or exceed</b> the following score-point distributions for the major work of the grade.</p> <ul style="list-style-type: none"> <li>• 85% of the total points in grades K–2 align exclusively to the major work of the grade.</li> <li>• 75% of the total points in grades 3–5 align exclusively to the major work of the grade.</li> <li>• 65% of the total points in grades 6–8 align exclusively to the major work of the grade.</li> </ul>	N/A	
	<p><b>FOR HIGH SCHOOL ONLY</b></p> <p><b>For high school</b>, aligned assessments or sets of assessments <b>meet or exceed</b> the following score-point distribution:</p> <ul style="list-style-type: none"> <li>• 50% of the total points in high school align to content of Common Core State Standards identified as <a href="#">widely applicable prerequisites</a> for a range of college majors, postsecondary programs, and careers.<sup>4</sup></li> </ul>	Yes	The majority of points awarded in the assessments are given to content identified as widely applicable prerequisites as described by the CCSS.

<sup>3</sup> Refer also to criterion #1 in [K–8 Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criterion #1 in the [High School Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>4</sup> Refer also to page 8 in the [High School Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION I (continued): NON-NEGOTIABLE CRITERIA</b>			
<p><b>Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.<sup>5</sup></b></p> <p><i>This criterion applies to fixed form or CAT assessments, whether a summative assessment or a set of interim/benchmark assessments. All items also should reflect the metric.</i></p> <p><input type="checkbox"/> Yes    <input type="checkbox"/> No</p>	<p>90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level.</p> <p>Commonly misaligned topics include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• <b>Probability</b>, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7)</li> <li>• <b>Statistical distributions</b>, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and <b>statistical association or trends</b>, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grades 6–8; see CCSSM for specific expectations by grade level.)</li> <li>• <b>Similarity, congruence, or geometric transformations</b>. (Introduced in the CCSSM in grade 8)</li> <li>• <b>Symmetry</b> of shapes, including line/reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)</li> </ul>	N/A	High School standards are not separated into different grade levels, but rather different topic areas.

<sup>5</sup> Refer also to criterion #2 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION II: Balance</b>			
<p><b>4. RIGOR AND BALANCE:</b> Each grade/course’s assessments reflect the balances in the Standards and help students meet the Standards’ rigorous expectations by helping students develop conceptual understanding, procedural skill and fluency, and application.<sup>6</sup></p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p><input type="checkbox"/> Yes    <input checked="" type="checkbox"/> No</p>	<p><b>4a) For Conceptual Understanding:</b></p> <ul style="list-style-type: none"> <li>• <b>K–High School:</b> At least 20% of the total score-points on the assessment(s) for each grade or course explicitly require students to demonstrate conceptual understanding of key mathematical concepts, especially where called for in specific content standards or cluster headings.</li> </ul>	<b>No</b>	Approximately 14% of the score-points on the assessment require students to demonstrate conceptual knowledge (A-APR.B.3, A-REI.A.1, F-IF.A).
	<p><b>4b) For Procedural Skill and Fluency:</b></p> <ul style="list-style-type: none"> <li>• <b>K–6:</b> At least 20% of the score-points on the assessment(s) for each grade explicitly assess procedural skill and fluency requirements in the Standards.</li> <li>• <b>7–8 and High School:</b> At least 20% of the score-points on the assessment(s) for each grade or course explicitly assess procedural skill and fluency/culminating standards. <ul style="list-style-type: none"> <li>• Grade 7: 7.EE.3, 7.EE.4, 7.NS.1</li> <li>• Grade 8: 8.EE.7, 8.G.9</li> <li>• High School: See <a href="#">PARCC Model Content Frameworks</a>, pages 46, 49, 53, 54</li> </ul> </li> </ul>	<b>Yes</b>	At least 20% of the score-points on the assessment for each grade explicitly assess procedural skill and fluency standards.
	<p><b>4c) For Applications</b></p> <ul style="list-style-type: none"> <li>• <b>K–5:</b> At least 20% of the total score-points on the assessment(s) for each grade explicitly assess solving single- or multi-step word problems.</li> <li>• <b>6–8:</b> At least 25% of the total score points on the assessment(s) for each grade explicitly assess solving single- and multi-step word problems and simple models.</li> <li>• <b>High School:</b> At least 30% of the total score-points on the assessment(s) for each high school course explicitly assess single- and multi-step word problems, simple models, and substantial modeling/application problems.</li> </ul>	<b>Yes</b>	At least 30% of the total score-points on the assessment explicitly assess word problems, models, or modeling/application problems.

<sup>6</sup> Refer also to criterion #4 in the [K–8 Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criterion #2 in the [High School Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).



	<p><b>4d) Grades 3-High School:</b> PARCC Type II and Type III Performance-Based Tasks <sup>7</sup></p> <ul style="list-style-type: none"> <li>• At least two items on each assessment for each grade or course align with PARCC’s Type II (Subclaim C) Evidence Statements. One item is a 3-point item and the second a 4-point item. A rubric for hand scoring any part of an item that cannot be machine scored is provided.</li> <li>• At least two items on each assessment for each grade or course align with PARCC’s Type III (Subclaim D) Evidence Statements. One item is a 3-point item and the second a 6-point item. A rubric for hand scoring any part of an item that cannot be machine scored is provided.</li> </ul>	<b>No</b>	<p>No 3-point or 6-point items are used in the assessments. The assessments use a variety of 1-point, 2-point, and 4-point items. The 4-point items do not match the description of PARCC’s Type II evidence statements.</p>
--	---	-----------	--

<sup>7</sup>See page 2 of [PARCC’s Evidence Tables](#) - High Level Overview and the PBA Evidence tables for each grade. An example of a Subclaim C evidence statement is 4.C.2. An example of a Subclaim D evidence statement is 4.D.1. To view PARCC’s prototype Type II and Type III items, go to <http://www.parcconline.org/samples/mathematics/grade-4-mathematics>.

ADDITIONAL INDICATORS OF QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION III: ADDITIONAL INDICATORS OF QUALITY</b>		
<p><b>5. Practice-Content Connections.</b> Each grade/course’s assessments include items that meaningfully connect the Standards for Mathematical Content and Standards for Mathematical Practice. However, not all items need to align to a Standard for Mathematical Practice. And there is no requirement to have an equal balance among the Standards for Mathematical Practice in any set of items or test forms.<sup>8</sup></p>	No	The Standards for Mathematical Practice are not linked to any items, and there is no mention of them anywhere in the benchmark assessments.
<p><b>6. Assessing Supporting Content.</b> Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course.<sup>9</sup></p>	Yes	Items addressing supporting content support the major content of Algebra I although this is not clearly stated.
<p><b>7. Addressing Every Standard for Mathematical Practice.</b> Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course.</p>	No	The Standards for Mathematical Practice are not addressed.
<p><b>8. Expressing Mathematical Reasoning.</b> There are sufficiently many points on the assessment(s) for each grade or course that explicitly assess expressing and/or communicating mathematical reasoning.</p>	No	There are not sufficiently many points on the assessment that require students to express and communicate mathematical reasoning. Most of the points are earned through multiple choice items that do not allow students to express or communicate mathematical reasoning.
<p><b>9. Constructing Forms Without Cueing Solution Processes.</b> Item sequences do not cue the student to use a certain solution process during problem solving and assessments include problems requiring different types of solution processes within the same section.</p>	No	Items cue the student to use a certain solution process during problem solving (e.g., some items direct the student to create an equation or inequality and then solve the equation, and some items say solve by factoring). Assessments do include problems that require different types of solution processes in the same section.
<p><b>10. Calling for Variety in Student Work.</b> Items require a variety in what students produce. For example, items require students to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.<sup>10</sup></p>	Yes	Although a majority of the items are multiple choice, some items require students to produce explanations, functions, and equations.

<sup>8</sup> Refer also to criterion #7 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criteria #5 [High School Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>9</sup> Refer also to criterion #3 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>10</sup> Refer also to criterion #9 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criteria #7 [High School Publishers' Criteria](#) for the CCSSM (Spring 2013).

<b>11. Quality Materials.</b> The assessment items, answer keys, and documentation are free from mathematical errors.	<b>Yes</b>	Assessment items, answer keys, and documentation are free from mathematical errors.
---	------------	---

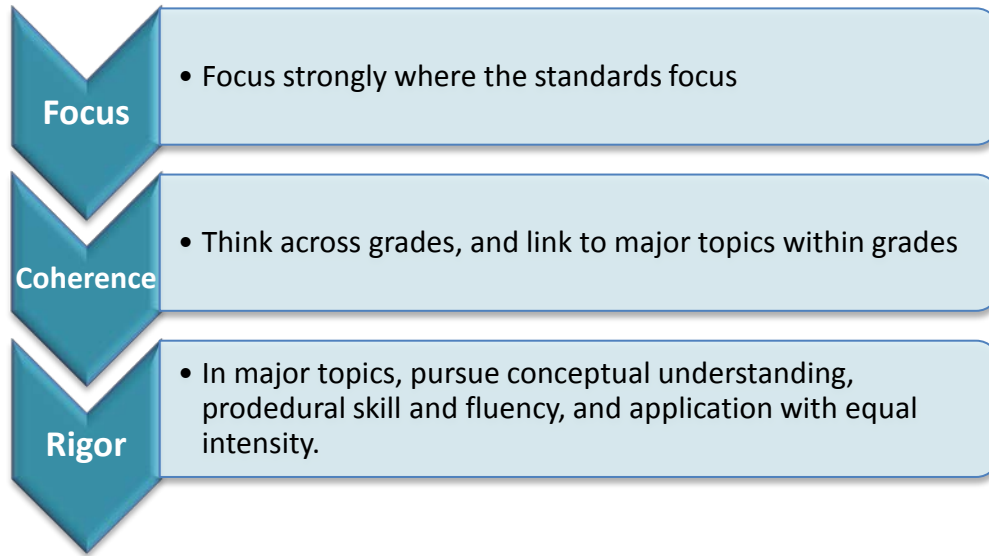
**Tier 1 ratings** receive a “Yes” in Column 1 for Criteria 1-3, a “Yes” in Column 1 for Criteria 4, and a “Yes” for all additional indicators 5-11.

**Tier 2 ratings** receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 3), a “Yes” in Column 1 for Criteria 4, but at least one “No” for additional indicators 5-11.

**Tier 3 ratings** receive a “No” in Column 1 for at least criteria in Section II or Section III.

FINAL EVALUATION			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	Criteria	Y/N	Final Justification/Comments
I: Non-Negotiables	1. Alignment of Test Items	Yes	Most test items and/or sets of items exhibit alignment to the full intent of the CCSSM for that grade or course by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s).
	2. Focus on Major Work	Yes	A majority of the points are devoted to widely applicable prerequisites.
	3. Focus in K-8	N/A	
II. Balance	4. Rigor and Balance	No	Conceptual understanding is lacking, and there are no items that indicate alignment to Subclaim C or Subclaim D.
II: Additional Indicators of Quality	5. Practice-Content Connections	No	The Standards for Mathematical Practice are not linked to any items, and there is no mention of them anywhere in the benchmark assessments.
	6. Assessing Supporting Content	Yes	Items addressing supporting content support the major content of Algebra I although this is not clearly stated.
	7. Addressing Every Standard for Mathematical Practice	No	The Standards for Mathematical Practice are not addressed in the benchmark assessments.
	8. Expressing Mathematical Reasoning	No	There are not sufficiently many points on the assessment that require students to express and communicate mathematical reasoning. Most of the points are earned through multiple choice items that do not allow students to express or communicate mathematical reasoning.
	9. Constructing Forms Without Cueing Solution Processes	No	Items do cue the student to use a certain solution process during problem solving.
	10. Calling for Variety in Student Work	Yes	Although a majority of the items are multiple choice, some included items require students to produce explanations, functions, and equations.
	11. Quality Materials	Yes	Assessment items, answer keys, and documentation are free from mathematical errors.
<b>FINAL DECISION FOR THIS MATERIAL: <u>Tier III, Not representing quality</u></b>			

Strong mathematics instruction contains the following elements:



**Title:** Common Core Math Benchmark Assessments (Geometry)

**Grade:** 10

**Publisher:** Measured Progress, Inc.

**Copyright:** 2013

**Overall Rating:** Tier III, Not representing quality

**Tier I, Tier II, Tier III Elements of this review:**

STRONG	WEAK
<a href="#">Alignment of Test Items</a> (Non-Negotiable)	<a href="#">Rigor and Balance</a>
<a href="#">Focus on Major Work</a> (Non-Negotiable)	<a href="#">Practice-Content Connections</a>
<a href="#">Assessing Supporting Content</a>	<a href="#">Addressing Every Standard for Mathematical Practice</a>
<a href="#">Constructing Forms Without Cueing Solution Processes</a>	<a href="#">Expressing Mathematical Reasoning</a>
<a href="#">Calling for a Variety in Student Work</a>	
<a href="#">Quality Materials</a>	

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a “Yes” for all indicators in Column 2 for Section I, then the materials receive a “Yes” in Column 1. If there is a “No” for any indicator in Column 2 for Section I, then the materials receive a “No” in Column 1.

In Section II, if there is a “Yes” for all indicators in Column 2, then the materials receive a “Yes” in Column 1. If there is a “No” for any indicator in Column 2 for Section II, then the materials receive a “No” in Column 1.

For Section III, review each indicator individually.

**Tier 1 ratings** receive a “Yes” in Column 1 for Criteria 1– 11.

**Tier 2 ratings** receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1–3), a “Yes” in Column 1 for Criteria 4 in Section II, but at least one “No” in Section III.

**Tier 3 ratings** receive a “No” in Column 1 in Section II or Section III.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION I: NON-NEGOTIABLE CRITERIA</b>			
<p><b>Non-Negotiable 1. ALIGNMENT OF TEST ITEMS:</b> 90% of test items and/or sets of items exhibit alignment to the full intent of the CCSSM for that grade or course<sup>12</sup> by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s).</p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. All items and/or sets of items should reflect the metric.</i></p> <p><input checked="" type="checkbox"/> Yes    <input type="checkbox"/> No</p>	<p><b>1a)</b> Items and/or sets of items directly reflect the language of individual standards.</p> <ul style="list-style-type: none"> <li>For example, 6.EE.3 puts the emphasis on applying properties of operations and generating equivalent expressions, not just mechanically simplifying.</li> <li>Most items aligned to a single standard should assess the central concern of the standard in question.</li> </ul>	<b>Yes</b>	Items and sets of items directly reflect the language of the individual standards. Items address the central concern of the standard in questions (e.g., HS.G-CO.01.03: Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself is evidenced in several problems that ask students to determine the transformations that carry a figure onto itself).
	<p><b>1b)</b> Items and/or sets of items align with <a href="#">PARCC's evidence tables</a> for grades 3-8 and adhere to content limitations outlined in that document. All limitations for all grade K-HS provided in footnotes of the CCSSM are also followed. For example, in Grade 3 denominators for fractions are limited to 2, 3, 4, 6 and 8.</p>	<b>N/A</b>	
	<p><b>1c)</b> The overall set of items reflect the <a href="#">progressions</a> in the Standards.</p> <ul style="list-style-type: none"> <li>For example, multiplication and division items in grade 3 emphasize equal groups, with no rate problems (grade 6 in CCSS).</li> </ul>	<b>Yes</b>	The overall set of items reflects the progressions in the standards.
	<p><b>1d)</b> Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.</p>	<b>Yes</b>	Within the complete set of items, items access all levels of content hierarchy as indicated in the high school state standards. There are items that address individual standards and cluster headings. For example, Form D item 9 targets cluster HSG-SRT.A.
	<p><b>1e)</b> Using the number system appropriate to the grade level.</p> <ul style="list-style-type: none"> <li>For example, in grade 3 there are some items involving fractions greater than 1; in the middle grades, arithmetic and algebra use the rational number system, not just the integers.</li> </ul>	<b>Yes</b>	The number systems used are appropriate for the high school level. Students manipulate a variety of numbers within the real number system.

<sup>1</sup>Refer also to the [K-8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and the [High School Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>2</sup>See the [Quality Criteria Checklist for Mathematics](#).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION I (continued): NON-NEGOTIABLE CRITERIA</b>			
<p><b>Non-Negotiable 2. FOCUS ON MAJOR WORK*</b>: The large majority of points in each grade K–8 are devoted to the major work of the grade, and the majority of points in each High School course are devoted to widely applicable prerequisites.<sup>3</sup></p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p><input checked="" type="checkbox"/> Yes    <input type="checkbox"/> No</p> <p><b>*As applicable to the grade level assessment being reviewed.</b></p>	<p><b>FOR GRADES K–8 ONLY</b></p> <p><b>For grades K–8</b>, each grade/course’s assessments <b>meet or exceed</b> the following score-point distributions for the major work of the grade.</p> <ul style="list-style-type: none"> <li>• 85% of the total points in grades K–2 align exclusively to the major work of the grade.</li> <li>• 75% of the total points in grades 3–5 align exclusively to the major work of the grade.</li> <li>• 65% of the total points in grades 6–8 align exclusively to the major work of the grade.</li> </ul>	N/A	
	<p><b>FOR HIGH SCHOOL ONLY</b></p> <p><b>For high school</b>, aligned assessments or sets of assessments <b>meet or exceed</b> the following score-point distribution:</p> <ul style="list-style-type: none"> <li>• 50% of the total points in high school align to content of Common Core State Standards identified as <a href="#">widely applicable prerequisites</a> for a range of college majors, postsecondary programs, and careers.<sup>4</sup></li> </ul>		

<sup>3</sup> Refer also to criterion #1 in [K–8 Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criterion #1 in the [High School Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>4</sup> Refer also to page 8 in the [High School Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION I (continued): NON-NEGOTIABLE CRITERIA</b>			
<p><b>Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.<sup>5</sup></b></p> <p><i>This criterion applies to fixed form or CAT assessments, whether a summative assessment or a set of interim/benchmark assessments. All Items also should reflect the metric.</i></p> <p><input type="checkbox"/> Yes    <input type="checkbox"/> No</p>	<p>90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level.</p> <p>Commonly misaligned topics include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• <b>Probability</b>, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7)</li> <li>• <b>Statistical distributions</b>, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and <b>statistical association or trends</b>, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grades 6–8; see CCSSM for specific expectations by grade level.)</li> <li>• <b>Similarity, congruence, or geometric transformations</b>. (Introduced in the CCSSM in grade 8)</li> <li>• <b>Symmetry</b> of shapes, including line/reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)</li> </ul>	<p><b>N/A</b></p>	<p>High School standards are not separated into different grade levels, but rather different topic areas.</p>

<sup>5</sup> Refer also to criterion #2 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).



CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION II: Balance</b>			
<p><b>4. RIGOR AND BALANCE: Each grade/course’s assessments reflect the balances in the Standards and help students meet the Standards’ rigorous expectations by helping students develop conceptual understanding, procedural skill and fluency, and application.<sup>6</sup></b></p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p><input type="checkbox"/> Yes    <input checked="" type="checkbox"/> No</p>	<p><b>4a) For Conceptual Understanding:</b></p> <ul style="list-style-type: none"> <li>• <b>K–High School:</b> At least 20% of the total score-points on the assessment(s) for each grade or course explicitly require students to demonstrate conceptual understanding of key mathematical concepts, especially where called for in specific content standards or cluster headings.</li> </ul>	<b>No</b>	Approximately 14% of the score-points on the assessments require students to demonstrate conceptual knowledge (HSG-CO.B). It should also be noted that the PARCC Model Content Frameworks include standards HSG-C.A.1, HSG-C.A.2, and HSG-C.A.3, which also require conceptual understanding, in Geometry. These standards are not addressed on these assessments.
	<p><b>4b) For Procedural Skill and Fluency:</b></p> <ul style="list-style-type: none"> <li>• <b>K–6:</b> At least 20% of the score-points on the assessment(s) for each grade explicitly assess procedural skill and fluency requirements in the Standards.</li> <li>• <b>7–8 and High School:</b> At least 20% of the score-points on the assessment(s) for each grade or course explicitly assess procedural skill and fluency/culminating standards. <ul style="list-style-type: none"> <li>• Grade 7: 7.EE.3, 7.EE.4, 7.NS.1</li> <li>• Grade 8: 8.EE.7, 8.G.9</li> <li>• High School: See <a href="#">PARCC Model Content Frameworks</a>, pages 46, 49, 53, 54</li> </ul> </li> </ul>	<b>Yes</b>	Approximately 23% of the score-points on the assessment for Geometry assess procedural skill and fluency as indicated by G-SRT.B.5, G-GPE.B.4, G-GPE.B.5, G-GPE.B.7, and G-CO.D.12 as noted in the PARCC Model Content Frameworks.
	<p><b>4c) For Applications</b></p> <ul style="list-style-type: none"> <li>• <b>K–5:</b> At least 20% of the total score-points on the assessment(s) for each grade explicitly assess solving single- or multi-step word problems.</li> <li>• <b>6–8:</b> At least 25% of the total score points on the assessment(s) for each grade explicitly assess solving single- and multi-step word problems and simple models.</li> <li>• <b>High School:</b> At least 30% of the total score-points on the assessment(s) for each high school course explicitly assess single- and multi-step word problems, simple models, and substantial modeling/application problems.</li> </ul>	<b>No</b>	Approximately 8% of the items address starred standards. HSG-SRT.C.8, HSG-GMD.A.3, and HSG-MG.A are not assessed at all.

<sup>6</sup> Refer also to criterion #4 in the [K–8 Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criterion #2 in the [High School Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

	<p><b>4d) Grades 3-High School:</b> PARCC Type II and Type III Performance-Based Tasks <sup>7</sup></p> <ul style="list-style-type: none"> <li>• At least two items on each assessment for each grade or course align with PARCC’s Type II (Subclaim C) Evidence Statements. One item is a 3-point item and the second a 4-point item. A rubric for hand scoring any part of an item that cannot be machine scored is provided.</li> <li>• At least two items on each assessment for each grade or course align with PARCC’s Type III (Subclaim D) Evidence Statements. One item is a 3-point item and the second a 6-point item. A rubric for hand scoring any part of an item that cannot be machine scored is provided.</li> </ul>	<b>No</b>	<p>No 3-point or 6-point items are used in the assessments. The measured progress assessments use a variety of 1-point, 2-point, and 4-point items. The 4-point items do not match the description of PARCC’s Type II evidence statements.</p>
--	---	-----------	--

<sup>7</sup>See page 2 of [PARCC’s Evidence Tables](#) - High Level Overview and the PBA Evidence tables for each grade. An example of a Subclaim C evidence statement is 4.C.2. An example of a Subclaim D evidence statement is 4.D.1. To view PARCC’s prototype Type II and Type III items, go to <http://www.parcconline.org/samples/mathematics/grade-4-mathematics>.

ADDITIONAL INDICATORS OF QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION III:ADDITIONAL INDICATORS OF QUALITY</b>		
<p><b>5. Practice-Content Connections.</b> Each grade/course’s assessments include items that meaningfully connect the Standards for Mathematical Content and Standards for Mathematical Practice. However, not all items need to align to a Standard for Mathematical Practice. And there is no requirement to have an equal balance among the Standards for Mathematical Practice in any set of items or test forms.<sup>8</sup></p>	<b>No</b>	The Standards for Mathematical Practice are not linked to any items, and there is no mention of them anywhere in the benchmark assessments.
<p><b>6. Assessing Supporting Content.</b> Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course.<sup>9</sup></p>	<b>Yes</b>	Items addressing supporting content support the major content of Geometry although this is not clearly stated.
<p><b>7. Addressing Every Standard for Mathematical Practice.</b> Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course.</p>	<b>No</b>	The Standards for Mathematical Practice are not addressed in the benchmark assessments.
<p><b>8. Expressing Mathematical Reasoning.</b> There are sufficiently many points on the assessment(s) for each grade or course that explicitly assess expressing and/or communicating mathematical reasoning.</p>	<b>No</b>	There are not sufficiently many points on the assessment that require students to express and communicate mathematical reasoning. Most of the points are earned through multiple choice items that do not allow students to express or communicate mathematical reasoning.
<p><b>9. Constructing Forms Without Cueing Solution Processes.</b> Item sequences do not cue the student to use a certain solution process during problem solving and assessments include problems requiring different types of solution processes within the same section.</p>	<b>Yes</b>	Items do not cue the student to use a certain solution process during problem solving. Assessments include problems that require different types of solution processes in the same section.
<p><b>10. Calling for Variety in Student Work.</b> Items require a variety in what students produce. For example, items require students to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.<sup>10</sup></p>	<b>Yes</b>	Although a majority of the items are multiple choice, some included items require students to produce explanations, functions, and equations.
<p><b>11. Quality Materials.</b> The assessment items, answer keys, and documentation are free from mathematical errors.</p>	<b>Yes</b>	Assessment items, answer keys, and documentation are free from mathematical errors.

<sup>8</sup> Refer also to criterion #7 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criteria #5 [High School Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>9</sup> Refer also to criterion #3 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>10</sup> Refer also to criterion #9 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criteria #7 [High School Publishers' Criteria](#) for the CCSSM (Spring 2013).

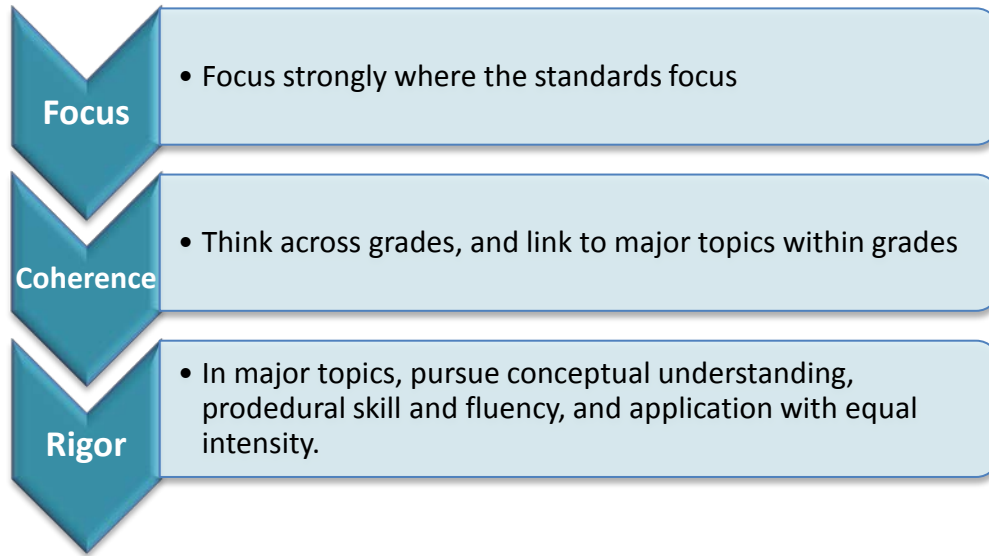
**Tier 1 ratings** receive a “Yes” in Column 1 for Criteria 1-3, a “Yes” in Column 1 for Criteria 4, and a “Yes” for all additional indicators 5-11.

**Tier 2 ratings** receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 3), a “Yes” in Column 1 for Criteria 4, but at least one “No” for additional indicators 5-11.

**Tier 3 ratings** receive a “No” in Column 1 for at least criteria in Section II or Section III.

FINAL EVALUATION			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	Criteria	Y/N	Final Justification/Comments
I: Non-Negotiables	1. Alignment of Test Items	Yes	Most test items and/or sets of items exhibit alignment to the full intent of the CCSSM for that grade or course by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s).
	2. Focus on Major Work	Yes	A majority of the points are devoted to widely applicable prerequisites.
	3. Focus in K-8	N/A	
II. Balance	4. Rigor and Balance	No	Conceptual understanding and application are lacking, and there are no items that indicate alignment to Subclaim C or Subclaim D.
II: Additional Indicators of Quality	5. Practice-Content Connections	No	The Standards for Mathematical Practice are not linked to any items, and there is no mention of them anywhere in the benchmark assessments.
	6. Assessing Supporting Content	Yes	Items addressing supporting content support the major content of Geometry although this is not clearly stated.
	7. Addressing Every Standard for Mathematical Practice	No	The Standards for Mathematical Practice are not addressed in the benchmark assessments.
	8. Expressing Mathematical Reasoning	No	There are not sufficiently many points on the assessment that require students to express and communicate mathematical reasoning. Most of the points are earned through multiple choice items that do not allow students to express or communicate mathematical reasoning.
	9. Constructing Forms Without Cueing Solution Processes	Yes	Items do not cue the student to use a certain solution process during problem solving. Assessments include problems that require different types of solution processes in the same section.
	10. Calling for Variety in Student Work	Yes	Although a majority of the items are multiple choice, some included items require students to produce explanations, functions, and equations.
	11. Quality Materials	Yes	Assessment items, answer keys, and documentation are free from mathematical errors.
<b>FINAL DECISION FOR THIS MATERIAL: Tier III, Not representing quality</b>			

Strong mathematics instruction contains the following elements:



**Title:** Common Core Math Benchmark Assessments (Algebra II)

**Grade:** 11-12

**Publisher:** Measured Progress, Inc.

**Copyright:** 2013

**Overall Rating:** Tier III, Not representing quality

**Tier I, Tier II, Tier III Elements of this review:**

STRONG	WEAK
<a href="#">Focus on Major Work</a> (Non-Negotiable)	<a href="#">Alignment of Test Items</a> (Non-Negotiable)
<a href="#">Assessing Supporting Content</a>	<a href="#">Rigor and Balance</a>
<a href="#">Constructing Forms Without Cueing Solution Processes</a>	<a href="#">Practice-Content Connections</a>
<a href="#">Calling for a Variety in Student Work</a>	<a href="#">Addressing Every Standard for Mathematical Practice</a>
<a href="#">Quality Materials</a>	<a href="#">Expressing Mathematical Reasoning</a>

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a “Yes” for all indicators in Column 2 for Section I, then the materials receive a “Yes” in Column 1. If there is a “No” for any indicator in Column 2 for Section I, then the materials receive a “No” in Column 1.

In Section II, if there is a “Yes” for all indicators in Column 2, then the materials receive a “Yes” in Column 1. If there is a “No” for any indicator in Column 2 for Section II, then the materials receive a “No” in Column 1.

For Section III, review each indicator individually.

**Tier 1 ratings** receive a “Yes” in Column 1 for Criteria 1– 11.

**Tier 2 ratings** receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1–3), a “Yes” in Column 1 for Criteria 4 in Section II, but at least one “No” in Section III.

**Tier 3 ratings** receive a “No” in Column 1 in Section II or Section III.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION I: NON-NEGOTIABLE CRITERIA</b>			
<p><b>Non-Negotiable 1. ALIGNMENT OF TEST ITEMS:</b> 90% of test items and/or sets of items exhibit alignment to the full intent of the CCSSM for that grade or course<sup>12</sup> by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s).</p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. All items and/or sets of items should reflect the metric.</i></p> <p><input type="checkbox"/> Yes    <input checked="" type="checkbox"/> No</p>	<p><b>1a)</b> Items and/or sets of items directly reflect the language of individual standards.</p> <ul style="list-style-type: none"> <li>For example, 6.EE.3 puts the emphasis on applying properties of operations and generating equivalent expressions, not just mechanically simplifying.</li> <li>Most items aligned to a single standard should assess the central concern of the standard in question.</li> </ul>	<b>Yes</b>	Items and sets of items directly reflect the language of the individual standards. Items address the central concern of the standard in questions (e.g., HSF-IF.C.8 is addressed in Form C item 16. This item requires students to rewrite a function in order to its maximum value).
	<p><b>1b)</b> Items and/or sets of items align with <a href="#">PARCC's evidence tables</a> for grades 3-8 and adhere to content limitations outlined in that document. All limitations for all grade K-HS provided in footnotes of the CCSSM are also followed. For example, in Grade 3 denominators for fractions are limited to 2, 3, 4, 6 and 8.</p>	<b>N/A</b>	
	<p><b>1c)</b> The overall set of items reflect the <a href="#">progressions</a> in the Standards.</p> <ul style="list-style-type: none"> <li>For example, multiplication and division items in grade 3 emphasize equal groups, with no rate problems (grade 6 in CCSS).</li> </ul>	<b>No</b>	<p>Not all standards included in Algebra II in the PARCC Model Content Framework are addressed in the benchmark assessment. Standards not addressed are HSN-Q.A.2, HSA-SSE.B.3, HSA-SSE.B.4, HSA-APR.C.4, HSA-APR.D.6, HSF-IF.A.3, HSF-IF.C.7, HSF-BF.A.2, HSF-BF.B.4a, HSF-LE.A.2, HSF-LE.A.4, HSF-LE.B.5, HSF-TF.A.1-2, HSF-TF.B.5, HSF-TF.C.8, HSG-GPE.A.2, HSS-ID.A.4, HSS-ID.B.6, HSS-IC.A.1-2, HSS-IC.B.3-6, HSS-CP.A.1-5, and HSS-CP.B.6-7.</p> <p>Standards are also included that are not in the PARCC Model Content Framework. Standards included are HSA-APR.A.1, HSA-SSE.A.1, and HSN-RN.B.3.</p>
	<p><b>1d)</b> Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.</p>	<b>Yes</b>	Within the complete set of items, items access all levels of content hierarchy as indicated in the high school state standards. There are items that address individual standards and cluster headings. For example, Form C item 1 targets cluster HSN-RN.A.

<sup>1</sup>Refer also to the [K-8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and the [High School Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>2</sup>See the [Quality Criteria Checklist for Mathematics](#).

	<b>1e) Using the number system appropriate to the grade level.</b> <ul style="list-style-type: none"> <li>For example, in grade 3 there are some items involving fractions greater than 1; in the middle grades, arithmetic and algebra use the rational number system, not just the integers.</li> </ul>	<b>Yes</b>	The number systems used are appropriate for the high school level. Students manipulate a variety of numbers within the real number system.
--	---	------------	--

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION I (continued): NON-NEGOTIABLE CRITERIA</b>			
<p><b>Non-Negotiable 2. FOCUS ON MAJOR WORK*</b>: The large majority of points in each grade K–8 are devoted to the major work of the grade, and the majority of points in each High School course are devoted to widely applicable prerequisites.<sup>3</sup></p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p><input checked="" type="checkbox"/> Yes    <input type="checkbox"/> No</p> <p><b>*As applicable to the grade level assessment being reviewed.</b></p>	<b>FOR GRADES K–8 ONLY</b>	<b>N/A</b>	
	<p><b>For grades K–8</b>, each grade/course’s assessments <b>meet or exceed</b> the following score-point distributions for the major work of the grade.</p> <ul style="list-style-type: none"> <li>85% of the total points in grades K–2 align exclusively to the major work of the grade.</li> <li>75% of the total points in grades 3–5 align exclusively to the major work of the grade.</li> <li>65% of the total points in grades 6–8 align exclusively to the major work of the grade.</li> </ul>		
	<b>FOR HIGH SCHOOL ONLY</b>	<b>Yes</b>	The majority of points awarded in the assessments are given to content identified as widely applicable prerequisites as described by the state standards.
	<p><b>For high school</b>, aligned assessments or sets of assessments <b>meet or exceed</b> the following score-point distribution:</p> <ul style="list-style-type: none"> <li>50% of the total points in high school align to content of Common Core State Standards identified as <a href="#">widely applicable prerequisites</a> for a range of college majors, postsecondary programs, and careers.<sup>4</sup></li> </ul>		

<sup>3</sup> Refer also to criterion #1 in [K–8 Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criterion #1 in the [High School Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>4</sup> Refer also to page 8 in the [High School Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION I (continued): NON-NEGOTIABLE CRITERIA</b>			
<p><b>Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.<sup>5</sup></b></p> <p><i>This criterion applies to fixed form or CAT assessments, whether a summative assessment or a set of interim/benchmark assessments. All Items also should reflect the metric.</i></p> <p><input type="checkbox"/> Yes    <input type="checkbox"/> No</p>	<p>90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level.</p> <p>Commonly misaligned topics include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• <b>Probability</b>, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7)</li> <li>• <b>Statistical distributions</b>, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and <b>statistical association or trends</b>, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grades 6–8; see CCSSM for specific expectations by grade level.)</li> <li>• <b>Similarity, congruence, or geometric transformations.</b> (Introduced in the CCSSM in grade 8)</li> <li>• <b>Symmetry</b> of shapes, including line/reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)</li> </ul>	<p><b>N/A</b></p>	<p>High School standards are not separated into different grade levels, but rather different topic areas.</p>

<sup>5</sup> Refer also to criterion #2 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).



CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION II: Balance</b>			
<p><b>4. RIGOR AND BALANCE: Each grade/course’s assessments reflect the balances in the Standards and help students meet the Standards’ rigorous expectations by helping students develop conceptual understanding, procedural skill and fluency, and application.<sup>6</sup></b></p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p><b>4a) For Conceptual Understanding:</b></p> <ul style="list-style-type: none"> <li><b>K–High School:</b> At least 20% of the total score-points on the assessment(s) for each grade or course explicitly require students to demonstrate conceptual understanding of key mathematical concepts, especially where called for in specific content standards or cluster headings.</li> </ul>	<b>Yes</b>	Approximately 26% of the score-points on the assessments require students to demonstrate conceptual knowledge (HSA-SPR.B.2, HSA-APR.B.3, HSA-REI.A.1, and HSA-REI.A.2). It should also be noted that the PARCC Model Content Frameworks include standards HSF-IF.A.3, HSF-TF.A.1, HSS-IC-A, and HSS-CP.A, which also require conceptual understanding, in Algebra II. These standards are not addressed on these assessments.
	<p><b>4b) For Procedural Skill and Fluency:</b></p> <ul style="list-style-type: none"> <li><b>K–6:</b> At least 20% of the score-points on the assessment(s) for each grade explicitly assess procedural skill and fluency requirements in the Standards.</li> <li><b>7–8 and High School:</b> At least 20% of the score-points on the assessment(s) for each grade or course explicitly assess procedural skill and fluency/culminating standards. <ul style="list-style-type: none"> <li>Grade 7: 7.EE.3, 7.EE.4, 7.NS.1</li> <li>Grade 8: 8.EE.7, 8.G.9</li> <li>High School: See <a href="#">PARCC Model Content Frameworks</a>, pages 46, 49, 53, 54</li> </ul> </li> </ul>	<b>No</b>	Approximately 12% of the score-points on the assessment for Algebra II assess procedural skill and fluency as indicated by A-SSE.A.2 as noted in the PARCC Model Content Frameworks. A-APR.D.6, and F-IF.A.3 are not assessed at all.
	<p><b>4c) For Applications</b></p> <ul style="list-style-type: none"> <li><b>K–5:</b> At least 20% of the total score-points on the assessment(s) for each grade explicitly assess solving single- or multi-step word problems.</li> <li><b>6–8:</b> At least 25% of the total score points on the assessment(s) for each grade explicitly assess solving single- and multi-step word problems and simple models.</li> <li><b>High School:</b> At least 30% of the total score-points on the assessment(s) for each high school course explicitly assess single- and multi-step word problems, simple models, and substantial modeling/application problems.</li> </ul>	<b>No</b>	Approximately 23% of the items address starred standards. HSN-Q.A.2, HSF-IF.C.7, HSF-LE.A.2, HSF-LE.A.4, HSF.LE.B.5, and HSF-TF.B.5 are not assessed at all.

<sup>6</sup> Refer also to criterion #4 in the [K–8 Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criterion #2 in the [High School Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

	<p><b>4d) Grades 3-High School:</b> PARCC Type II and Type III Performance-Based Tasks <sup>7</sup></p> <ul style="list-style-type: none"> <li>• At least two items on each assessment for each grade or course align with PARCC’s Type II (Subclaim C) Evidence Statements. One item is a 3-point item and the second a 4-point item. A rubric for hand scoring any part of an item that cannot be machine scored is provided.</li> <li>• At least two items on each assessment for each grade or course align with PARCC’s Type III (Subclaim D) Evidence Statements. One item is a 3-point item and the second a 6-point item. A rubric for hand scoring any part of an item that cannot be machine scored is provided.</li> </ul>	<p><b>No</b></p>	<p>No 3-point or 6-point items are used in the assessments. The measured progress assessments use a variety of 1-point, 2-point, and 4-point items. The 4-point items do not match the description of PARCC’s Type II evidence statements.</p>
--	---	------------------	--

<sup>7</sup>See page 2 of [PARCC’s Evidence Tables](#) - High Level Overview and the PBA Evidence tables for each grade. An example of a Subclaim C evidence statement is 4.C.2. An example of a Subclaim D evidence statement is 4.D.1. To view PARCC’s prototype Type II and Type III items, go to <http://www.parcconline.org/samples/mathematics/grade-4-mathematics>.

ADDITIONAL INDICATORS OF QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
<b>SECTION III:ADDITIONAL INDICATORS OF QUALITY</b>		
<b>5. Practice-Content Connections.</b> Each grade/course’s assessments include items that meaningfully connect the Standards for Mathematical Content and Standards for Mathematical Practice. However, not all items need to align to a Standard for Mathematical Practice. And there is no requirement to have an equal balance among the Standards for Mathematical Practice in any set of items or test forms. <sup>8</sup>	<b>No</b>	The Standards for Mathematical Practice are not linked to any items, and there is no mention of them anywhere in the benchmark assessments.
<b>6. Assessing Supporting Content.</b> Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course. <sup>9</sup>	<b>Yes</b>	Items addressing supporting content support the major content of Algebra II although this is not clearly stated.
<b>7. Addressing Every Standard for Mathematical Practice.</b> Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course.	<b>No</b>	The Standards for Mathematical Practice are not addressed in the benchmark assessments.
<b>8. Expressing Mathematical Reasoning.</b> There are sufficiently many points on the assessment(s) for each grade or course that explicitly assess expressing and/or communicating mathematical reasoning.	<b>No</b>	There are not sufficiently many points on the assessment that require students to express and communicate mathematical reasoning. Most of the points are earned through multiple choice items that do not allow students to express or communicate mathematical reasoning.
<b>9. Constructing Forms Without Cueing Solution Processes.</b> Item sequences do not cue the student to use a certain solution process during problem solving and assessments include problems requiring different types of solution processes within the same section.	<b>Yes</b>	Items do not cue the student to use a certain solution process during problem solving. Assessments include problems that require different types of solution processes in the same section.
<b>10. Calling for Variety in Student Work.</b> Items require a variety in what students produce. For example, items require students to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc. <sup>10</sup>	<b>Yes</b>	Although a majority of the items are multiple choice, some included items require students to produce explanations, functions, and equations.
<b>11. Quality Materials.</b> The assessment items, answer keys, and documentation are free from mathematical errors.	<b>Yes</b>	Assessment items, answer keys, and documentation are free from mathematical errors.

**Tier 1 ratings** receive a “Yes” in Column 1 for Criteria 1-3, a “Yes” in Column 1 for Criteria 4, and a “Yes” for all additional indicators 5-11.

<sup>8</sup> Refer also to criterion #7 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criteria #5 [High School Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>9</sup> Refer also to criterion #3 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>10</sup> Refer also to criterion #9 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criteria #7 [High School Publishers' Criteria](#) for the CCSSM (Spring 2013).

**Tier 2 ratings** receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 3), a “Yes” in Column 1 for Criteria 4, but at least one “No” for additional indicators 5-11.

**Tier 3 ratings** receive a “No” in Column 1 for at least criteria in Section II or Section III.

FINAL EVALUATION			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	Criteria	Y/N	Final Justification/Comments
I: Non-Negotiables	1. Alignment of Test Items	No	Standards are included in the benchmarks that are not identified as Algebra II standards, and standards are left out that are identified as Algebra II standards.
	2. Focus on Major Work	Yes	A majority of the points are devoted to widely applicable prerequisites.
	3. Focus in K-8	N/A	
II. Balance	4. Rigor and Balance	No	Fluency and application are lacking, and there are no items that indicate alignment to Subclaim C or Subclaim D.
II: Additional Indicators of Quality	5. Practice-Content Connections	No	The Standards for Mathematical Practice are not linked to any items, and there is no mention of them anywhere in the benchmark assessments.
	6. Assessing Supporting Content	Yes	Items addressing supporting content support the major content of Geometry although this is not clearly stated.
	7. Addressing Every Standard for Mathematical Practice	No	The Standards for Mathematical Practice are not addressed in the benchmark assessments.
	8. Expressing Mathematical Reasoning	No	There are not sufficiently many points on the assessment that require students to express and communicate mathematical reasoning. Most of the points are earned through multiple choice items that do not allow students to express or communicate mathematical reasoning.
	9. Constructing Forms Without Cueing Solution Processes	Yes	Items do not cue the student to use a certain solution process during problem solving. Assessments include problems that require different types of solution processes in the same section.
	10. Calling for Variety in Student Work	Yes	Although a majority of the items are multiple choice, some included items require students to produce explanations, functions, and equations.
	11. Quality Materials	Yes	Assessment items, answer keys, and documentation are free from mathematical errors.
<b>FINAL DECISION FOR THIS MATERIAL: Tier III, Not representing quality</b>			