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: **Scantron Math Assessments** Grade: **K-5**

Publisher: **Scantron Corporation** 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

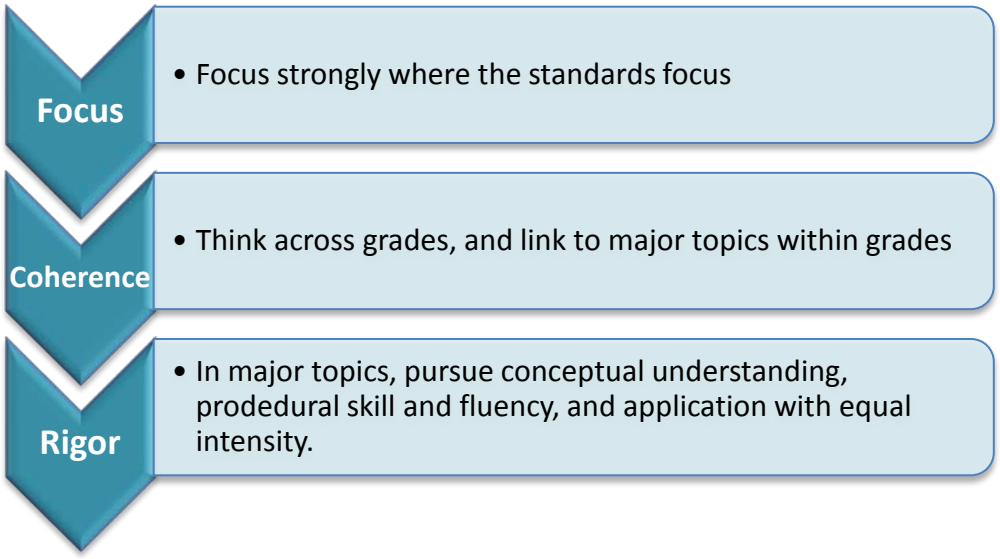
The following two indicators may be impacted:

- 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 in grades 1-4 because a sufficient amount of assessments items are aligned to major work of their corresponding grade. This program currently is reviewed as "No" for this criterion in grade K because an insufficient amount of assessments items are aligned to the major work of the grade.	For grades 1-4, 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. For grade K, since these materials received a "No" for this indicator, the current weakness will likely remain and should be addressed by adjusting or supplementing with stronger programs.
Focus in K-8 (Non-Negotiable)	This program currently is reviewed as "Yes" for this criterion because a sufficient amount of assessments items address only knowledge of topics found in the specified grade level.	Make sure to review all assessments to ensure that 90% of items on any one assessment address only knowledge of topics found in the Louisiana Student Standards for Mathematics (LSSM) in the specified grade level.

Strong mathematics instruction contains the following elements:



Title: **Scantron Math Assessments**

Grade: **Grade K-5**

Publisher: **Scantron Corporation**

Copyright: **2013**

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

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

STRONG	WEAK
Focus on Major Work (Non-Negotiable)*	Alignment of Test Items (Non-Negotiable)
Focus in K-8 (Non-Negotiable)	
* Weak at Grade K	

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.

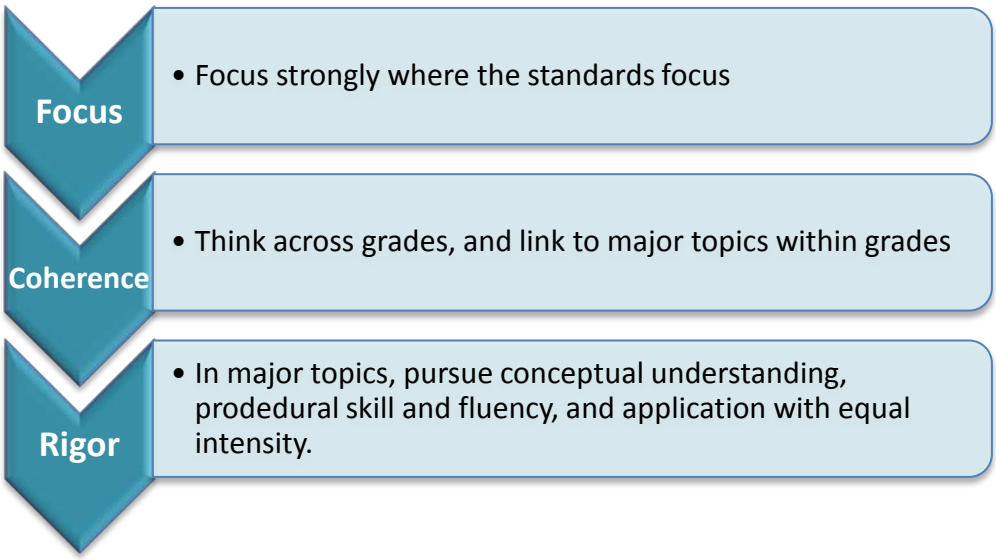
Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 11.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 3), a "Yes" in Column 1 for Criteria 4 in Section II, but at least one "No" in Section III.
Tier 3 ratings receive a "No" in Column 1 in Section II or Section III.

Click below for complete grade-level reviews:

Grade K (Tier 3) Grade 1 (Tier 3) Grade 2 (Tier 3)

Grade 3 (Tier 3) Grade 4 (Tier 3) Grade 5 (Tier 3)

Strong mathematics instruction contains the following elements:



Title: Scantron Math Assessment **Grade:** K

Publisher: Scantron Corporation **Copyright:** 2013

Overall Rating: Tier III, Not representing quality

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

STRONG	WEAK
Focus in K-8 (Non-Negotiable)	Alignment of Test Items (Non-Negotiable)
	Focus on Major Work (Non-Negotiable)

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
SECTION I: NON-NEGOTIABLE CRITERIA			
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[1] [2] by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s). *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.* ☐ Yes ■ No	**1a)** Items and/or sets of items directly reflect the language of individual standards. • For example, 6.EE.3 puts the emphasis on applying properties of operations and generating equivalent expressions, not just mechanically simplifying. • Most items aligned to a single standard should assess the central concern of the standard in question.	**No**	Items are included that do not reflect the language of individual standards. For example, items for K.G.A.3 include shapes that are not squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, or spheres as stated in the cluster heading for this standard (K.G.3 PM Item 01, K.G.3 PM Item 02, K.G.3 PM Item 03, K.G.3 PM Item 04, and K.G.3 PM Item 05). Also, K.G.4 PM Item 02 doesn't require students to analyze or compare shapes (just to pick one that "looks like" another). Also, items K.CC.1 PM Item 01, K.CC.1 PM Item 02, K.CC.1 PM Item 03, K.CC.1 PM Item 04, K.CC.1 PM Item 05, K.CC.1 PM Item 06, K.CC.1 PM Item 07, K.CC.1 PM Item 16, K.CC.1 PM Item 17, and K.CC.1 PM Item 18 do not align to K.CC.A.1 (students are not told to count and the counting does not begin at 1). Also, items K.CC.1 PM Item 08, K.CC.1 PM Item 09, K.CC.1 PM Item 10, and K.CC.1 PM Item 11, and K.CC.1 PM Item 12 are not aligned to standard K.CC.A.1 (skip-counting by 10s and/or not from 10). Also, items K.CC.1 PM Item 13, K.CC.1 PM Item 14, K.CC.1 PM Item 15, K.CC.1 PM Item 19, and K.CC.1 PM Item 20 ask students to identify a pattern and/or do not begin at 10. In addition, items K.CC.2 PM Item 01 and K.CC.2 PM Item 10 are not aligned to K.CC.A.2 (students are asked which numbers are in order- not to count on). Item K.CC.2

[1] 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).
[2] See the Quality Criteria Checklist for Mathematics.

			PM Item 04 does not give the student a number to count forward from. Of the 21 items for K.CC.A.3, only 1 addresses the second part of the standard (Represent a number of objects with a written numeral 0-20)
	1b) Items and/or sets of items align with PARCC's evidence tables 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.	**Yes**	Items follow the limitations for Grade K.
	1c) The overall set of items reflect the progressions in the Standards. For example, multiplication and division items in grade 3 emphasize equal groups, with no rate problems (grade 6 in CCSS).	**Yes**	Items reflect the progressions in the Standards.
	1d) Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.	**No**	Standard K.G.B.5 is not assessed at all. Items only assess individual standards. There are no items aligned to cluster headings or domains.
	1e) 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.	**Yes**	The number system is appropriate for Grade K.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 2. FOCUS ON MAJOR WORK*: 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.[3] *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.* ☐ Yes ■ No ***As applicable to the grade level assessment being reviewed.**	**FOR GRADES K–8 ONLY** **For grades K–8**, each grade/course's assessments **meet or exceed** the following score-point distributions for the major work of the grade. • 85% of the total points in grades K–2 align exclusively to the major work of the grade. • 75% of the total points in grades 3–5 align exclusively to the major work of the grade. • 65% of the total points in grades 6–8 align exclusively to the major work of the grade.	**No**	In grade K, approximately 80% of the items align to the major work of the grade.
	FOR HIGH SCHOOL ONLY **For high school**, aligned assessments or sets of assessments **meet or exceed** the following score-point distribution: • 50% of the total points in high school align to content of Common Core State Standards identified as widely applicable prerequisites for a range of college majors, postsecondary programs, and careers.[4]		

[3] 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).
[4] 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
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.[5] *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.* ■ Yes ☐ No	90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level. Commonly misaligned topics include, but are not limited to: • **Probability,** including chance, likely outcomes, probability models**.** (Introduced in the CCSSM in grade 7) • **Statistical distributions**, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and **statistical association or trends**, 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.) • **Similarity, congruence, or geometric transformations.** (Introduced in the CCSSM in grade 8) • **Symmetry** of shapes, including line/reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)	**Yes**	Over 90% of the items address Grade K topics.

[5] 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
SECTION II: Balance			
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.[6] *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.* ☐ Yes ☐ No	**4a)** ***For Conceptual Understanding:*** • ***K–High School*:** 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.		Not evaluated. Non-negotiable criteria were not met.

	4b) ***For Procedural Skill and Fluency:***
	• ***K–6:*** At least 20% of the score-points on the assessment(s) for each grade explicitly assess procedural skill and fluency requirements in the Standards.
	• ***7–8 and High School:*** At least 20% of the score-points on the assessment(s) for each grade or course explicitly assess procedural skill and fluency/culminating standards.
	  • Grade 7: 7.EE.3, 7.EE.4, 7.NS.1
	  • Grade 8: 8.EE.7, 8.G.9
	  • High School: See PARCC Model Content Frameworks, pages 46, 49, 53, 54
			Not evaluated. Non-negotiable criteria were not met.

	4c) ***For Applications*** • ***K–5:*** At least 20% of the total score-points on the assessment(s) for each grade explicitly assess solving single- or multi-step word problems. • ***6–8:*** 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. • ***High School:*** 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.		Not evaluated. Non-negotiable criteria were not met.

[6] 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).

	4d) ***Grades 3-High School***: PARCC Type II and Type III Performance-Based Tasks [7] • 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. • 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.		Not evaluated. Non-negotiable criteria were not met.

[7] 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.

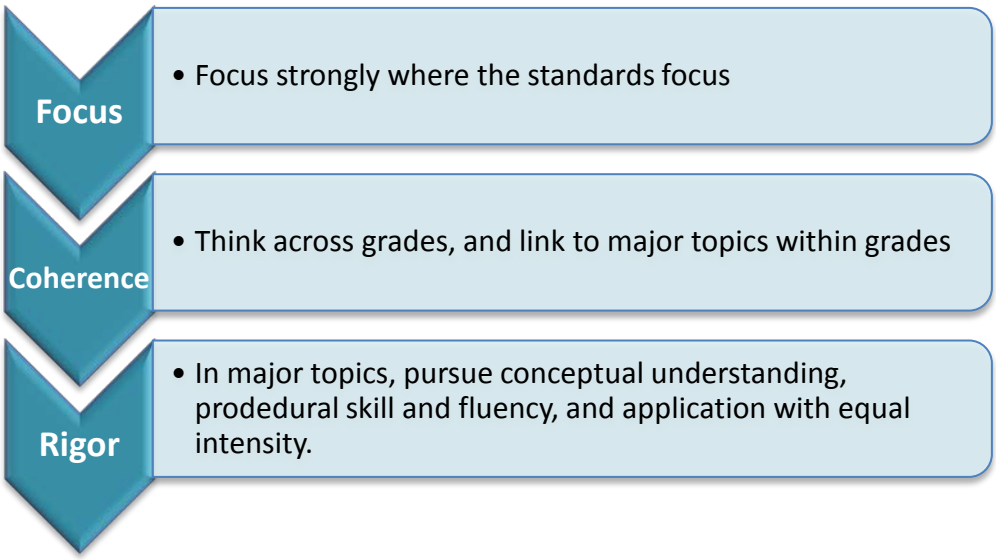
ADDITIONAL INDICATORS OF QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
SECTION III:ADDITIONAL INDICATORS OF QUALITY		
5. Practice-Content Connections. Each grade/course's assessments include items that meaningfully connect the Standards for Mathematical Content and Standards for Mathematical Practice. 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.[8]		Not evaluated. Non-negotiable criteria were not met.
6. Assessing Supporting Content. Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course.[9]		Not evaluated. Non-negotiable criteria were not met.
7. Addressing Every Standard for Mathematical Practice. Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course.		Not evaluated. Non-negotiable criteria were not met.
8. Expressing Mathematical Reasoning. There are sufficiently many points on the assessment(s) for each grade or course that explicitly assess expressing and/or communicating mathematical reasoning.		Not evaluated. Non-negotiable criteria were not met.
9. Constructing Forms Without Cueing Solution Processes. 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.		Not evaluated. Non-negotiable criteria were not met.
10. Calling for Variety in Student Work. 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.[10]		Not evaluated. Non-negotiable criteria were not met.
11. Quality Materials. The assessment items, answer keys, and documentation are free from mathematical errors.		Not evaluated. Non-negotiable criteria were not met.

[8] 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).
[9] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[10] 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	**No**	Items are included that do not reflect the language of individual standards. Standard K.G.B.5 is not assessed at all. There are no items aligned to cluster headings or domains.
	2. Focus on Major Work	**No**	In grade K, approximately 80% of the items align to the major work of the grade.
	3. Focus in K-8	**Yes**	Over 90% of the items address Grade K topics.
II. Balance	4. Rigor and Balance		Not evaluated. Non-negotiable criteria were not met.
II: Additional Indicators of Quality	5. Practice-Content Connections		Not evaluated. Non-negotiable criteria were not met.
	6. Assessing Supporting Content		Not evaluated. Non-negotiable criteria were not met.
	7. Addressing Every Standard for Mathematical Practice		Not evaluated. Non-negotiable criteria were not met.
	8. Expressing Mathematical Reasoning		Not evaluated. Non-negotiable criteria were not met.
	9. Constructing Forms Without Cueing Solution Processes		Not evaluated. Non-negotiable criteria were not met.
	10. Calling for Variety in Student Work		Not evaluated. Non-negotiable criteria were not met.
	11. Quality Materials		Not evaluated. Non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: <u>Tier III, Not representing quality</u>			

Strong mathematics instruction contains the following elements:



Title: **Scantron Math Assessment** **Grade:** **1**

Publisher: **Scantron Corporation** **Copyright:** **2013**

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

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

STRONG	WEAK
Focus on Major Work (Non-Negotiable)	Alignment of Test Items (Non-Negotiable)
Focus in K-8 (Non-Negotiable)	

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
SECTION I: NON-NEGOTIABLE CRITERIA			
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[1] [2] by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s). *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.* ☐ Yes ■ No	**1a)** Items and/or sets of items directly reflect the language of individual standards. • For example, 6.EE.3 puts the emphasis on applying properties of operations and generating equivalent expressions, not just mechanically simplifying. • Most items aligned to a single standard should assess the central concern of the standard in question.	**No**	Items are included that do not reflect the language of individual standards. For example, standard 1.OA.A.1 clearly states that addition and subtraction should be used to solve "word problems." The standard states that students can solve "by using objects, drawing, and equations with a symbol for the unknown number to represent the problem." Some of the items aligned to this standard have already provided those representations of the problem for the student, so students do not need to read the word problem in order to answer the item (see 1.OA.1 PM Item 03 and 1.OA.1 PM Item 09 for examples). Another example is Standard 1.OA.A.2 which requires students to represent and solve word problems with three whole numbers. Again, some of the items aligned to this standard have already provided those representations of the problem for the student, so students do not need to read the word problem in order to answer the item (see 1.OA.2 PM Item 03 and 1.OA.2 PM Item 04 for examples). Another example is Standard 1.OA.D.8 which states that students should "determine the unknown whole number in an addition or subtraction equation relating three whole numbers." Some of the items aligned to this standard do not provide an addition or subtraction equation (see 1.OA.8 PM Item 06 and 1.OA.8 PM Item 07).

[1] 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).
[2] See the Quality Criteria Checklist for Mathematics.

	1b) Items and/or sets of items align with PARCC's evidence tables for grades 3-8 and adhere to content limitations outlined	**Yes**	Items follow the limitations for Grade 1.
	1c) The overall set of items reflect the progressions in the Standards.	**Yes**	Items reflect the progressions in the Standards.
	1d) Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster	**No**	Standards 1.NBT.C.5 and 1.NBT.C.6 are not assessed at all. There are no items aligned
	1e) 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.	**Yes**	The number system is appropriate for Grade 1.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 2. FOCUS ON MAJOR WORK*: 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.[3] *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.* ■ Yes ☐ No ***As applicable to the grade level assessment being reviewed.**	**FOR GRADES K–8 ONLY** **For grades K–8**, each grade/course's assessments **meet or exceed** the following score-point distributions for the major work of the grade. • 85% of the total points in grades K–2 align exclusively to the major work of the grade. • 75% of the total points in grades 3–5 align exclusively to the major work of the grade. • 65% of the total points in grades 6–8 align exclusively to the major work of the grade.	**Yes**	In grade 1, approximately 85% of the items align to the major work of the grade. There are 37 items aligned to standard 1.MD.C.4, a supporting standard; this means that approximately 10% of the total items are aligned to this standard.
	FOR HIGH SCHOOL ONLY **For high school**, aligned assessments or sets of assessments **meet or exceed** the following score-point distribution: • 50% of the total points in high school align to content of Common Core State Standards identified as widely applicable prerequisites for a range of college majors, postsecondary programs, and careers.[4]		

[3] 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).
[4] 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
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.[5] *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.* ■ Yes ☐ No	90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level. Commonly misaligned topics include, but are not limited to: • **Probability,** including chance, likely outcomes, probability models**.** (Introduced in the CCSSM in grade 7) • **Statistical distributions**, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and **statistical association or trends**, 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.) • **Similarity, congruence, or geometric transformations.** (Introduced in the CCSSM in grade 8) • **Symmetry** of shapes, including line/reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)	**Yes**	Over 90% of the items address Grade 1 topics.

[5] 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
SECTION II: Balance			
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.[6] *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.* ☐ Yes ☐ No	**4a)** ***For Conceptual Understanding:*** • ***K–High School*:** 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.		Not evaluated. Non-negotiable criteria were not met.

	4b) ***For Procedural Skill and Fluency:***
	• ***K–6:*** At least 20% of the score-points on the assessment(s) for each grade explicitly assess procedural skill and fluency requirements in the Standards.
	• ***7–8 and High School:*** At least 20% of the score-points on the assessment(s) for each grade or course explicitly assess procedural skill and fluency/culminating standards.
	  • Grade 7: 7.EE.3, 7.EE.4, 7.NS.1
	  • Grade 8: 8.EE.7, 8.G.9
	  • High School: See PARCC Model Content Frameworks, pages 46, 49, 53, 54
			Not evaluated. Non-negotiable criteria were not met.

	4c) ***For Applications*** • ***K–5:*** At least 20% of the total score-points on the assessment(s) for each grade explicitly assess solving single- or multi-step word problems. • ***6–8:*** 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. • ***High School:*** 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.		Not evaluated. Non-negotiable criteria were not met.

[6] 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).

	4d) ***Grades 3-High School***: PARCC Type II and Type III Performance-Based Tasks [7] • 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. • 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.		Not evaluated. Non-negotiable criteria were not met.

[7] 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.

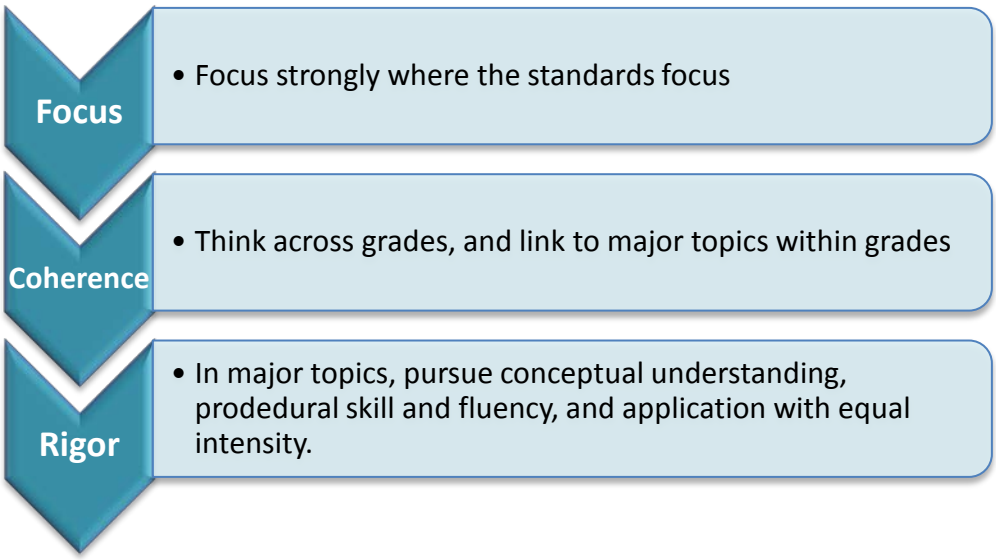
ADDITIONAL INDICATORS OF QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
SECTION III:ADDITIONAL INDICATORS OF QUALITY		
5. Practice-Content Connections. Each grade/course's assessments include items that meaningfully connect the Standards for Mathematical Content and Standards for Mathematical Practice. 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.[8]		Not evaluated. Non-negotiable criteria were not met.
6. Assessing Supporting Content. Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course.[9]		Not evaluated. Non-negotiable criteria were not met.
7. Addressing Every Standard for Mathematical Practice. Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course.		Not evaluated. Non-negotiable criteria were not met.
8. Expressing Mathematical Reasoning. There are sufficiently many points on the assessment(s) for each grade or course that explicitly assess expressing and/or communicating mathematical reasoning.		Not evaluated. Non-negotiable criteria were not met.
9. Constructing Forms Without Cueing Solution Processes. 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.		Not evaluated. Non-negotiable criteria were not met.
10. Calling for Variety in Student Work. 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.[10]		Not evaluated. Non-negotiable criteria were not met.
11. Quality Materials. The assessment items, answer keys, and documentation are free from mathematical errors.		Not evaluated. Non-negotiable criteria were not met.

[8] 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).
[9] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[10] 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	**No**	Items are included that do not reflect the language of individual standards. Standards 1.NBT.C.5 and 1.NBT.C.6 are not assessed at all. There are no items aligned to cluster headings or domains.
	2. Focus on Major Work	**Yes**	In grade 1, approximately 85% of the items align to the major work of the grade.
	3. Focus in K-8	**Yes**	Over 90% of the items address Grade 1 topics.
II. Balance	4. Rigor and Balance		Not evaluated. Non-negotiable criteria were not met.
II: Additional Indicators of Quality	5. Practice-Content Connections		Not evaluated. Non-negotiable criteria were not met.
	6. Assessing Supporting Content		Not evaluated. Non-negotiable criteria were not met.
	7. Addressing Every Standard for Mathematical Practice		Not evaluated. Non-negotiable criteria were not met.
	8. Expressing Mathematical Reasoning		Not evaluated. Non-negotiable criteria were not met.
	9. Constructing Forms Without Cueing Solution Processes		Not evaluated. Non-negotiable criteria were not met.
	10. Calling for Variety in Student Work		Not evaluated. Non-negotiable criteria were not met.
	11. Quality Materials		Not evaluated. Non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: <u>Tier III, Not representing quality</u>			

Strong mathematics instruction contains the following elements:



Title: **Scantron Math Assessment** **Grade:** **2**

Publisher: **Scantron Corporation** **Copyright:** **2013**

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

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

STRONG	WEAK
Focus on Major Work (Non-Negotiable)	Alignment of Test Items (Non-Negotiable)
Focus in K-8 (Non-Negotiable)	

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
SECTION I: NON-NEGOTIABLE CRITERIA			
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[1] [2] by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s). *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.* ☐ Yes ■ No	**1a)** Items and/or sets of items directly reflect the language of individual standards. • For example, 6.EE.3 puts the emphasis on applying properties of operations and generating equivalent expressions, not just mechanically simplifying. • Most items aligned to a single standard should assess the central concern of the standard in question.	**No**	Items are included that do not reflect the language of individual standards. For example, 2.G.A.2 PM Item 04 does not require students to partition a rectangle or count. Also, 2.G.A.3 PM Item 07 does not mention the shape of the fabric (there is also a word missing in the first sentence). Also, only 6 of the 15 items for 2.MD.A.1 require students to measure. As another example, 2.MD.10 PM Item 01 does not require students to draw a graph or solve put-together, take-apart, or compare problems, and 2.MD.10 PM Item 06 is not the type of compare problem identified in the CCSS. Another example is 2.MD.2 PM Item 03; students only measure an object once. Also, 2.MD.9 PM Item 04 does not require students to generate measurement data or make a line plot. Of the 15 items aligned to 2.NBT.A.2, 9 of them require students to recognize and extend a pattern; this standard is about skip-counting.
	1b) Items and/or sets of items align with PARCC's evidence tables 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.	**Yes**	Items follow the limitations for Grade 2.

[1] 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).
[2] See the Quality Criteria Checklist for Mathematics.

	1c) The overall set of items reflect the progressions in the Standards. For example, multiplication and division items in grade 3 emphasize equal groups, with no rate problems (grade 6 in CCSS).	**Yes**	Items reflect the progressions in the Standards.
	1d) Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.	**No**	Items only assess individual standards. There are no items aligned to cluster headings or domains.
	1e) 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.	**Yes**	The number system is appropriate for Grade 2.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 2. FOCUS ON MAJOR WORK*: 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.[3] *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.* ☐ Yes ☐ No ***As applicable to the grade level assessment being reviewed.**	**FOR GRADES K–8 ONLY** **For grades K–8**, each grade/course's assessments **meet or exceed** the following score-point distributions for the major work of the grade. • 85% of the total points in grades K–2 align exclusively to the major work of the grade. • 75% of the total points in grades 3–5 align exclusively to the major work of the grade. • 65% of the total points in grades 6–8 align exclusively to the major work of the grade.	**Yes**	In grade 2, approximately 85% of the items align to the major work of the grade.
	FOR HIGH SCHOOL ONLY **For high school**, aligned assessments or sets of assessments **meet or exceed** the following score-point distribution: • 50% of the total points in high school align to content of Common Core State Standards identified as widely applicable prerequisites for a range of college majors, postsecondary programs, and careers.[4]		

[3] 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).
[4] 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
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.[5] *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.* ■ Yes ☐ No	90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level. Commonly misaligned topics include, but are not limited to: • **Probability,** including chance, likely outcomes, probability models**.** (Introduced in the CCSSM in grade 7) • **Statistical distributions**, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and **statistical association or trends**, 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.) • **Similarity, congruence, or geometric transformations.** (Introduced in the CCSSM in grade 8) • **Symmetry** of shapes, including line/reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)	**Yes**	Over 90% of the items address Grade 2 topics.

[5] 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
SECTION II: Balance			
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.[6] *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.* ☐ Yes ☐ No	**4a)** ***For Conceptual Understanding:*** • ***K–High School*:** 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.		Not evaluated. Non-negotiable criteria were not met.

	4b) ***For Procedural Skill and Fluency:***
	• ***K–6:*** At least 20% of the score-points on the assessment(s) for each grade explicitly assess procedural skill and fluency requirements in the Standards.
	• ***7–8 and High School:*** At least 20% of the score-points on the assessment(s) for each grade or course explicitly assess procedural skill and fluency/culminating standards.
	  • Grade 7: 7.EE.3, 7.EE.4, 7.NS.1
	  • Grade 8: 8.EE.7, 8.G.9
	  • High School: See PARCC Model Content Frameworks, pages 46, 49, 53, 54
			Not evaluated. Non-negotiable criteria were not met.

	4c) ***For Applications*** • ***K–5:*** At least 20% of the total score-points on the assessment(s) for each grade explicitly assess solving single- or multi-step word problems. • ***6–8:*** 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. • ***High School:*** 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.		Not evaluated. Non-negotiable criteria were not met.

[6] 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).

	4d) ***Grades 3-High School***: PARCC Type II and Type III Performance-Based Tasks [7] • 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. • 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.		Not evaluated. Non-negotiable criteria were not met.

[7] 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.

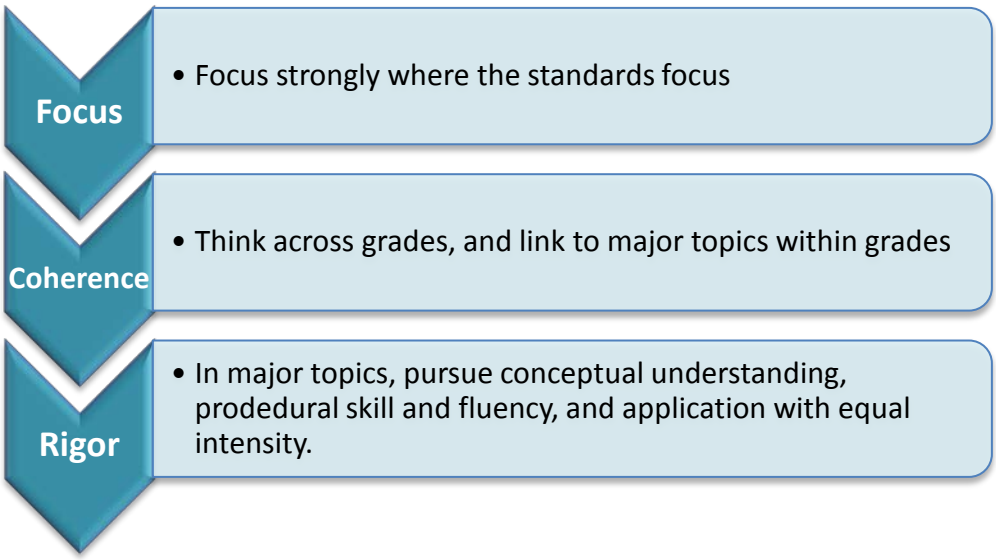
ADDITIONAL INDICATORS OF QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
SECTION III:ADDITIONAL INDICATORS OF QUALITY		
5. Practice-Content Connections. Each grade/course's assessments include items that meaningfully connect the Standards for Mathematical Content and Standards for Mathematical Practice. 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.[8]		Not evaluated. Non-negotiable criteria were not met.
6. Assessing Supporting Content. Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course.[9]		Not evaluated. Non-negotiable criteria were not met.
7. Addressing Every Standard for Mathematical Practice. Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course.		Not evaluated. Non-negotiable criteria were not met.
8. Expressing Mathematical Reasoning. There are sufficiently many points on the assessment(s) for each grade or course that explicitly assess expressing and/or communicating mathematical reasoning.		Not evaluated. Non-negotiable criteria were not met.
9. Constructing Forms Without Cueing Solution Processes. 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.		Not evaluated. Non-negotiable criteria were not met.
10. Calling for Variety in Student Work. 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.[10]		Not evaluated. Non-negotiable criteria were not met.
11. Quality Materials. The assessment items, answer keys, and documentation are free from mathematical errors.		Not evaluated. Non-negotiable criteria were not met.

[8] 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).
[9] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[10] 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	**No**	Items are included that do not reflect the language of individual standards. Items only assess individual standards. There are no items aligned to cluster headings or domains.
	2. Focus on Major Work	**Yes**	In grade 2, approximately 85% of the items align to the major work of the grade.
	3. Focus in K-8	**Yes**	Over 90% of the items address Grade 2 topics.
II. Balance	4. Rigor and Balance		Not evaluated. Non-negotiable criteria were not met.
II: Additional Indicators of Quality	5. Practice-Content Connections		Not evaluated. Non-negotiable criteria were not met.
	6. Assessing Supporting Content		Not evaluated. Non-negotiable criteria were not met.
	7. Addressing Every Standard for Mathematical Practice		Not evaluated. Non-negotiable criteria were not met.
	8. Expressing Mathematical Reasoning		Not evaluated. Non-negotiable criteria were not met.
	9. Constructing Forms Without Cueing Solution Processes		Not evaluated. Non-negotiable criteria were not met.
	10. Calling for Variety in Student Work		Not evaluated. Non-negotiable criteria were not met.
	11. Quality Materials		Not evaluated. Non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: <u>Tier III, Not representing quality</u>			

Strong mathematics instruction contains the following elements:



Title: **Scantron Math Assessment** **Grade:** **3**

Publisher: **Scantron Corporation** **Copyright:** **2013**

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

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

STRONG	WEAK
Focus on Major Work (Non-Negotiable)	Alignment of Test Items (Non-Negotiable)
Focus in K-8 (Non-Negotiable)	

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
SECTION I: NON-NEGOTIABLE CRITERIA			
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[1] [2] by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s). *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.* ☐ Yes ■ No	**1a)** Items and/or sets of items directly reflect the language of individual standards. • For example, 6.EE.3 puts the emphasis on applying properties of operations and generating equivalent expressions, not just mechanically simplifying. • Most items aligned to a single standard should assess the central concern of the standard in question.	**No**	Items are included that do not reflect the language of individual standards. For example, 3.G.1 PM item 01 simply requires students to count, not categorize shapes. Other Geometry items not reflecting the language of the standards include 3.G.1 PM Item 05, 3.G.1 PM Item 20, 3.G.2 PM Item 03 (this shape is 3-dimensional), 3.G.2 PM Item 09 (this item is about the difference between rows and columns- not equal areas), 3.G.2 PM Item 18 (not the area of one part- this isn't a unit fraction), 3.G.2 PM Item 19, 3.G.2 PM Item 20, and 3.G.2 PM Item 24. Other examples are 3.MD.1 PM Item 01 (don't have to tell time to the nearest minute), 3.MD.6 PM Item 01 (doesn't use unit squares), 3.MD.6 PM Item 03, 3.MD.7.a PM Item 01 (does not require use of side lengths), 3.MD.7.a PM Item 03 (uses two different rectangles), and 3.NF.1 PM Item 06 (item focuses on fairness- not fractions).

[1] 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).
[2] See the Quality Criteria Checklist for Mathematics.

	1b) Items and/or sets of items align with PARCC's evidence tables 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.	**No**	Items are included that do not align with the Evidence Tables and do not adhere to the limitations in the footnotes of the CCSSM. For example, 3.MD.2 PM Item 09 requires addition or multiplication outside of the scope of Grade 3. Also, according to the PARCC Evidence Tables, items for standard 3.NBT.A.2 should not have a context, and 5 of the 6 items have a context. Also, 3.NF.2.a PM Item 09 has an answer choice has a denominator of 7. 3.NF.2.a PM Item 07 and 3.NF.1 PM Item 14 have an answer choice with denominators of 5
	1c) The overall set of items reflect the progressions in the Standards. • For example, multiplication and division items in grade 3 emphasize equal groups, with no rate problems (grade 6 in CCSS).	**Yes**	Items reflect the progressions in the Standards.
	1d) Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.	**No**	Items only assess individual standards. There are no items aligned to cluster headings or domains.
	1e) 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.	**Yes**	The number system is appropriate for Grade 3.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 2. FOCUS ON MAJOR WORK*: 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.[3] *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.* ■ Yes ☐ No ***As applicable to the grade level assessment being reviewed.**	**FOR GRADES K–8 ONLY** **For grades K–8**, each grade/course's assessments **meet or exceed** the following score-point distributions for the major work of the grade. • 85% of the total points in grades K–2 align exclusively to the major work of the grade. • 75% of the total points in grades 3–5 align exclusively to the major work of the grade. • 65% of the total points in grades 6–8 align exclusively to the major work of the grade.	**Yes**	In grade 3, approximately 75% of the items align to the major work of the grade.
	FOR HIGH SCHOOL ONLY **For high school**, aligned assessments or sets of assessments **meet or exceed** the following score-point distribution: • 50% of the total points in high school align to content of Common Core State Standards identified as widely applicable prerequisites for a range of college majors, postsecondary programs, and careers.[4]		

[3] 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).
[4] 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
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.[5] *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.* ■ Yes ☐ No	90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level. Commonly misaligned topics include, but are not limited to: • **Probability,** including chance, likely outcomes, probability models**.** (Introduced in the CCSSM in grade 7) • **Statistical distributions**, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and **statistical association or trends**, 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.) • **Similarity, congruence, or geometric transformations.** (Introduced in the CCSSM in grade 8) • **Symmetry** of shapes, including line/reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)	**Yes**	Over 90% of the items address Grade 3 topics.

[5] 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
SECTION II: Balance			
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.[6] *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.* ☐ Yes ☐ No	**4a)** ***For Conceptual Understanding:*** • ***K–High School*:** 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.		Not evaluated. Non-negotiable criteria were not met.

	4b) ***For Procedural Skill and Fluency:***
	• ***K–6:*** At least 20% of the score-points on the assessment(s) for each grade explicitly assess procedural skill and fluency requirements in the Standards.
	• ***7–8 and High School:*** At least 20% of the score-points on the assessment(s) for each grade or course explicitly assess procedural skill and fluency/culminating standards.
	  • Grade 7: 7.EE.3, 7.EE.4, 7.NS.1
	  • Grade 8: 8.EE.7, 8.G.9
	  • High School: See PARCC Model Content Frameworks, pages 46, 49, 53, 54
			Not evaluated. Non-negotiable criteria were not met.

	4c) ***For Applications*** • ***K–5:*** At least 20% of the total score-points on the assessment(s) for each grade explicitly assess solving single- or multi-step word problems. • ***6–8:*** 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. • ***High School:*** 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.		Not evaluated. Non-negotiable criteria were not met.

[6] 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).

	4d) ***Grades 3-High School***: PARCC Type II and Type III Performance-Based Tasks [7] • 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. • 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.		Not evaluated. Non-negotiable criteria were not met.

[7] 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.

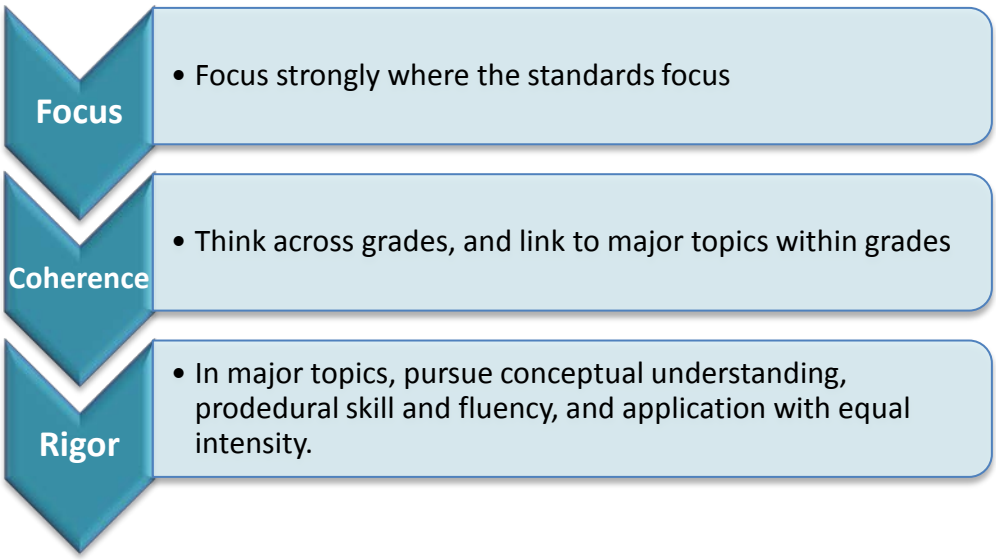
ADDITIONAL INDICATORS OF QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
SECTION III:ADDITIONAL INDICATORS OF QUALITY		
5. Practice-Content Connections. Each grade/course's assessments include items that meaningfully connect the Standards for Mathematical Content and Standards for Mathematical Practice. 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.[8]		Not evaluated. Non-negotiable criteria were not met.
6. Assessing Supporting Content. Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course.[9]		Not evaluated. Non-negotiable criteria were not met.
7. Addressing Every Standard for Mathematical Practice. Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course.		Not evaluated. Non-negotiable criteria were not met.
8. Expressing Mathematical Reasoning. There are sufficiently many points on the assessment(s) for each grade or course that explicitly assess expressing and/or communicating mathematical reasoning.		Not evaluated. Non-negotiable criteria were not met.
9. Constructing Forms Without Cueing Solution Processes. 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.		Not evaluated. Non-negotiable criteria were not met.
10. Calling for Variety in Student Work. 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.[10]		Not evaluated. Non-negotiable criteria were not met.
11. Quality Materials. The assessment items, answer keys, and documentation are free from mathematical errors.		Not evaluated. Non-negotiable criteria were not met.

[8] 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).
[9] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[10] 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	**No**	Items are included that do not reflect the language of individual standards. Items only assess individual standards. There are no items aligned to cluster headings or domains.
	2. Focus on Major Work	**Yes**	In grade 3, approximately 75% of the items align to the major work of the grade.
	3. Focus in K-8	**Yes**	Over 90% of the items address Grade 3 topics.
II. Balance	4. Rigor and Balance		Not evaluated. Non-negotiable criteria were not met.
II: Additional Indicators of Quality	5. Practice-Content Connections		Not evaluated. Non-negotiable criteria were not met.
	6. Assessing Supporting Content		Not evaluated. Non-negotiable criteria were not met.
	7. Addressing Every Standard for Mathematical Practice		Not evaluated. Non-negotiable criteria were not met.
	8. Expressing Mathematical Reasoning		Not evaluated. Non-negotiable criteria were not met.
	9. Constructing Forms Without Cueing Solution Processes		Not evaluated. Non-negotiable criteria were not met.
	10. Calling for Variety in Student Work		Not evaluated. Non-negotiable criteria were not met.
	11. Quality Materials		Not evaluated. Non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: Tier III, Not representing quality			

Strong mathematics instruction contains the following elements:



Title: **Scantron Math Assessment** **Grade:** **4**

Publisher: **Scantron Corporation** **Copyright:** **2013**

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

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

STRONG	WEAK
Focus on Major Work (Non-Negotiable)	Alignment of Test Items (Non-Negotiable)
Focus in K-8 (Non-Negotiable)	

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
SECTION I: NON-NEGOTIABLE CRITERIA			
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[1] [2] by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s). *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.* ☐ Yes ☒ No	**1a)** Items and/or sets of items directly reflect the language of individual standards. • For example, 6.EE.3 puts the emphasis on applying properties of operations and generating equivalent expressions, not just mechanically simplifying. • Most items aligned to a single standard should assess the central concern of the standard in question.	**No**	Items are included that do not reflect the language of individual standards. For example, 4.G.1 PM Item 01 and 4.G.1 PM Item 02 don't require drawing or identifying lines and angles in two-dimensional figures. Also, 4.NF.1 PM Item 02 does not focus on faction equivalence. Item 4.NF.1 PM Item 03 is aligned to 4.NF.A.1, but it requires comparison of two fractions. Also, 4.NF.1 PM Item 04 uses visual fraction models as called for in the standards, but the second picture in the answer choice doesn't have 3 rows so that it can be used to visually judge fraction equivalence. Likewise, in 4.NF.1 PM Item 05 the rectangles are different sizes, so it is difficult to use the models to judge fraction equivalence. 4.NF.2 PM Item 03 is not comparing fractions with different numerators and denominators. Also, 4.OA.1 PM Item 09 and 4.OA.1 PM Item 10 don't require students to interpret an equation or represent a verbal statement. Another example is 4.OA.2 PM Item 02; it does not require multiplication or division to solve a word problem.

[1] 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).
[2] See the Quality Criteria Checklist for Mathematics.

	1b) Items and/or sets of items align with PARCC's evidence tables 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.	**No**	Items are included that do not align with the Evidence Tables and do not adhere to the limitations in the footnotes of the CCSSM. For example, 4.NF.3 PM Item 03 has answer choices with denominators of 15. Also, 4.NF.3 PM Item 04 has answer choices with denominators of 13. Also, items for 4.NF.B.3c should not have a context according to the evidence tables, but many of the items aligned to this standard have a context. Also, the evidence tables state that items aligned to 4.NF.B.3c Denominators are limited to grade 3 possibilities (2, 3, 4, 6, 8) so as to keep computational difficulty lower, but 4.NF.3.c PM Item 06 includes denominators of 12. 4.NF.5 PM Item 02 should not have a context.
	1c) The overall set of items reflect the progressions in the Standards. For example, multiplication and division items in grade 3 emphasize equal groups, with no rate problems (grade 6 in CCSS).	**Yes**	Items reflect the progressions in the Standards.
	1d) Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.	**No**	Items only assess individual standards. There are no items aligned to cluster headings or domains.
	1e) 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.	**Yes**	The number system is appropriate for Grade 4.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 2. FOCUS ON MAJOR WORK*: 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.[3] *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.* ☐ Yes ☐ No ***As applicable to the grade level assessment being reviewed.**	**FOR GRADES K–8 ONLY** **For grades K–8**, each grade/course's assessments **meet or exceed** the following score-point distributions for the major work of the grade. • 85% of the total points in grades K–2 align exclusively to the major work of the grade. • 75% of the total points in grades 3–5 align exclusively to the major work of the grade. • 65% of the total points in grades 6–8 align exclusively to the major work of the grade.	**Yes**	In grade 4, approximately 75% of the items align to the major work of the grade.
	FOR HIGH SCHOOL ONLY **For high school**, aligned assessments or sets of assessments **meet or exceed** the following score-point distribution: • 50% of the total points in high school align to content of Common Core State Standards identified as widely applicable prerequisites for a range of college majors, postsecondary programs, and careers.[4]		

[3] 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).
[4] 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
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.[5] *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.* ■ Yes ☐ No	90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level. Commonly misaligned topics include, but are not limited to: • **Probability,** including chance, likely outcomes, probability models**.** (Introduced in the CCSSM in grade 7) • **Statistical distributions**, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and **statistical association or trends**, 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.) • **Similarity, congruence, or geometric transformations.** (Introduced in the CCSSM in grade 8) • **Symmetry** of shapes, including line/reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)	**Yes**	Over 90% of the items address Grade 4 topics.

[5] 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
SECTION II: Balance			
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.[6] *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.* ☐ Yes ☐ No	**4a)** ***For Conceptual Understanding:*** • ***K–High School*:** 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.		Not evaluated. Non-negotiable criteria were not met.

	4b) ***For Procedural Skill and Fluency:***
	• ***K–6:*** At least 20% of the score-points on the assessment(s) for each grade explicitly assess procedural skill and fluency requirements in the Standards.
	• ***7–8 and High School:*** At least 20% of the score-points on the assessment(s) for each grade or course explicitly assess procedural skill and fluency/culminating standards.
	  • Grade 7: 7.EE.3, 7.EE.4, 7.NS.1
	  • Grade 8: 8.EE.7, 8.G.9
	  • High School: See PARCC Model Content Frameworks, pages 46, 49, 53, 54
			Not evaluated. Non-negotiable criteria were not met.

	4c) ***For Applications*** • ***K–5:*** At least 20% of the total score-points on the assessment(s) for each grade explicitly assess solving single- or multi-step word problems. • ***6–8:*** 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. • ***High School:*** 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.		Not evaluated. Non-negotiable criteria were not met.

[6] 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).

	4d) ***Grades 3-High School***: PARCC Type II and Type III Performance-Based Tasks [7] • 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. • 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.		Not evaluated. Non-negotiable criteria were not met.

[7] 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.

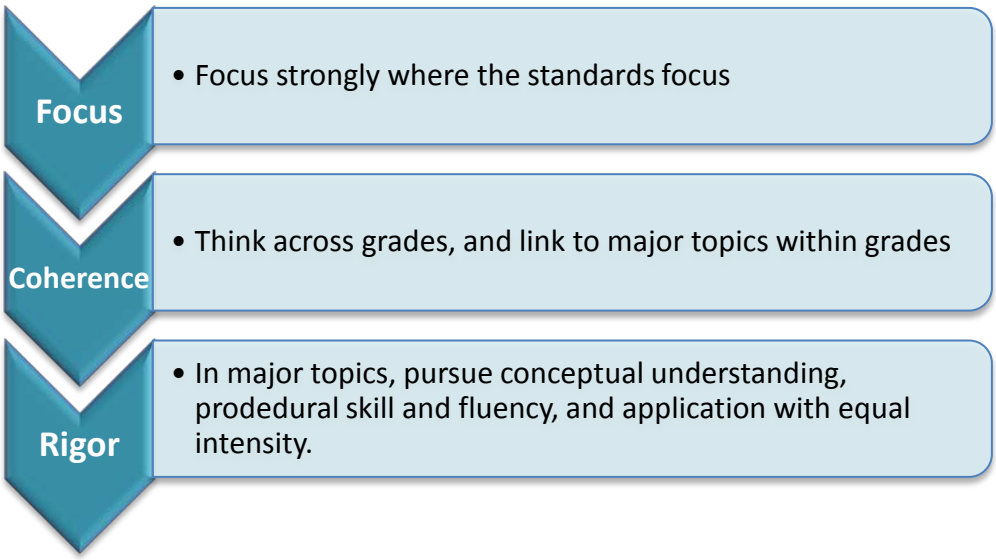
ADDITIONAL INDICATORS OF QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
SECTION III:ADDITIONAL INDICATORS OF QUALITY		
5. Practice-Content Connections. Each grade/course's assessments include items that meaningfully connect the Standards for Mathematical Content and Standards for Mathematical Practice. 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.[8]		Not evaluated. Non-negotiable criteria were not met.
6. Assessing Supporting Content. Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course.[9]		Not evaluated. Non-negotiable criteria were not met.
7. Addressing Every Standard for Mathematical Practice. Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course.		Not evaluated. Non-negotiable criteria were not met.
8. Expressing Mathematical Reasoning. There are sufficiently many points on the assessment(s) for each grade or course that explicitly assess expressing and/or communicating mathematical reasoning.		Not evaluated. Non-negotiable criteria were not met.
9. Constructing Forms Without Cueing Solution Processes. 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.		Not evaluated. Non-negotiable criteria were not met.
10. Calling for Variety in Student Work. 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.[10]		Not evaluated. Non-negotiable criteria were not met.
11. Quality Materials. The assessment items, answer keys, and documentation are free from mathematical errors.		Not evaluated. Non-negotiable criteria were not met.

[8] 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).
[9] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[10] 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	**No**	Items are included that do not reflect the language of individual standards. Items only assess individual standards. There are no items aligned to cluster headings or domains.
	2. Focus on Major Work	**Yes**	In grade 4, approximately 75% of the items align to the major work of the grade.
	3. Focus in K-8	**Yes**	Over 90% of the items address Grade 4 topics.
II. Balance	4. Rigor and Balance		Not evaluated. Non-negotiable criteria were not met.
II: Additional Indicators of Quality	5. Practice-Content Connections		Not evaluated. Non-negotiable criteria were not met.
	6. Assessing Supporting Content		Not evaluated. Non-negotiable criteria were not met.
	7. Addressing Every Standard for Mathematical Practice		Not evaluated. Non-negotiable criteria were not met.
	8. Expressing Mathematical Reasoning		Not evaluated. Non-negotiable criteria were not met.
	9. Constructing Forms Without Cueing Solution Processes		Not evaluated. Non-negotiable criteria were not met.
	10. Calling for Variety in Student Work		Not evaluated. Non-negotiable criteria were not met.
	11. Quality Materials		Not evaluated. Non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: <u>Tier III, Not representing quality</u>			

Strong mathematics instruction contains the following elements:



Title: **Scantron Math Assessment** **Grade:** **5**

Publisher: **Scantron Corporation** **Copyright:** **2013**

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

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

STRONG	WEAK
Focus on Major Work (Non-Negotiable)	Alignment of Test Items (Non-Negotiable)
Focus in K-8 (Non-Negotiable)	

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
SECTION I: NON-NEGOTIABLE CRITERIA			
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[1] [2] by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s). *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.* ☐ Yes ☒ No	**1a)** Items and/or sets of items directly reflect the language of individual standards. • For example, 6.EE.3 puts the emphasis on applying properties of operations and generating equivalent expressions, not just mechanically simplifying. • Most items aligned to a single standard should assess the central concern of the standard in question.	**No**	Items are included that do not reflect the language of individual standards. For example, 5.NBT.6 PM Item 01 and 5.NBT.6 PM Item 02 do not require students to find quotients. Also, 5.MD.3.a PM Item 02, 5.MD.3.a PM Item 03, 5.MD.3.a PM Item 04, 5.MD.3.a PM Item 05, 5.MD.3.a PM Item 06, and 5.MD.3.a PM Item 07 do not focus on 1 unit cube; it asks to identify a figure based on packing with unit cubes. Also, Standard 5.MD.C.3b specifically states that "A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units." 5.MD.3.b PM Item 02 shows a picture with gaps between the unit cubes. Another example is 5.MD.4 PM Item 07. This item doesn't show unit cubes.

[1] 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).
[2] See the Quality Criteria Checklist for Mathematics.

	1b) Items and/or sets of items align with PARCC's evidence tables 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.	**No**	Items are included that do not align with the Evidence Tables and do not adhere to the limitations in the footnotes of the CCSSM. Items aligned to 5.NBT.B.5 should not have a context according to the evidence tables, but 5.NBT.5 PM Item 05, 5.NBT.5 PM Item 06, 5.NBT.5 PM Item 07, and 5.NBT.5 PM Item 08 have a context. The evidence statement for 5.NBT.B.7 states "add two decimals." 5.NBT.7 PM Item 02 includes 3 decimals. 5.OA.2 PM Item 01 has students write an expression that leads to division of a fraction by a fraction (although simplification of the expression is not required).
	1c) The overall set of items reflect the progressions in the Standards. For example, multiplication and division items in grade 3 emphasize equal groups, with no rate problems (grade 6 in CCSS).	**Yes**	Items reflect the progressions in the Standards.
	1d) Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.	**No**	There are no items aligned to cluster headings or domains.
	1e) 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.	**Yes**	The number system is appropriate for Grade 5.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 2. FOCUS ON MAJOR WORK*: 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.[3] *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.* ■ Yes ☐ No ***As applicable to the grade level assessment being reviewed.**	**FOR GRADES K–8 ONLY** **For grades K–8**, each grade/course's assessments **meet or exceed** the following score-point distributions for the major work of the grade. • 85% of the total points in grades K–2 align exclusively to the major work of the grade. • 75% of the total points in grades 3–5 align exclusively to the major work of the grade. • 65% of the total points in grades 6–8 align exclusively to the major work of the grade.	**Yes**	In grade 5, approximately 75% of the items align to the major work of the grade.
	FOR HIGH SCHOOL ONLY **For high school**, aligned assessments or sets of assessments **meet or exceed** the following score-point distribution: • 50% of the total points in high school align to content of Common Core State Standards identified as widely applicable prerequisites for a range of college majors, postsecondary programs, and careers.[4]		

[3] 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).
[4] 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
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.[5] *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.* ■ Yes ☐ No	90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level. Commonly misaligned topics include, but are not limited to: • **Probability,** including chance, likely outcomes, probability models**.** (Introduced in the CCSSM in grade 7) • **Statistical distributions**, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and **statistical association or trends**, 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.) • **Similarity, congruence, or geometric transformations.** (Introduced in the CCSSM in grade 8) • **Symmetry** of shapes, including line/reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)	**Yes**	Over 90% of the items address Grade 5 topics.

[5] 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
SECTION II: Balance			
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.[6] *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.* ☐ Yes ☐ No	**4a)** ***For Conceptual Understanding:*** • ***K–High School*:** 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.		Not evaluated. Non-negotiable criteria were not met.

	4b) ***For Procedural Skill and Fluency:***
	• ***K–6:*** At least 20% of the score-points on the assessment(s) for each grade explicitly assess procedural skill and fluency requirements in the Standards.
	• ***7–8 and High School:*** At least 20% of the score-points on the assessment(s) for each grade or course explicitly assess procedural skill and fluency/culminating standards.
	  • Grade 7: 7.EE.3, 7.EE.4, 7.NS.1
	  • Grade 8: 8.EE.7, 8.G.9
	  • High School: See PARCC Model Content Frameworks, pages 46, 49, 53, 54
			Not evaluated. Non-negotiable criteria were not met.

	4c) ***For Applications*** • ***K–5:*** At least 20% of the total score-points on the assessment(s) for each grade explicitly assess solving single- or multi-step word problems. • ***6–8:*** 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. • ***High School:*** 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.		Not evaluated. Non-negotiable criteria were not met.

[6] 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).

	4d) ***Grades 3-High School***: PARCC Type II and Type III Performance-Based Tasks [7] • 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. • 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.		Not evaluated. Non-negotiable criteria were not met.

[7] 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
SECTION III:ADDITIONAL INDICATORS OF QUALITY		
5. Practice-Content Connections. 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.[8]		Not evaluated. Non-negotiable criteria were not met.
6. Assessing Supporting Content. Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course.[9]		Not evaluated. Non-negotiable criteria were not met.
7. Addressing Every Standard for Mathematical Practice. Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course.		Not evaluated. Non-negotiable criteria were not met.
8. Expressing Mathematical Reasoning. There are sufficiently many points on the assessment(s) for each grade or course that explicitly assess expressing and/or communicating mathematical reasoning.		Not evaluated. Non-negotiable criteria were not met.
9. Constructing Forms Without Cueing Solution Processes. 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.		Not evaluated. Non-negotiable criteria were not met.
10. Calling for Variety in Student Work. 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.[10]		Not evaluated. Non-negotiable criteria were not met.
11. Quality Materials. The assessment items, answer keys, and documentation are free from mathematical errors.		Not evaluated. Non-negotiable criteria were not met.

[8] 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).
[9] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[10] 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	**No**	Items are included that do not reflect the language of individual standards. There are no items aligned to cluster headings or domains.
	2. Focus on Major Work	**Yes**	In grade 5, approximately 75% of the items align to the major work of the grade.
	3. Focus in K-8	**Yes**	Over 90% of the items address Grade 5 topics.
II. Balance	4. Rigor and Balance		Not evaluated. Non-negotiable criteria were not met.
II: Additional Indicators of Quality	5. Practice-Content Connections		Not evaluated. Non-negotiable criteria were not met.
	6. Assessing Supporting Content		Not evaluated. Non-negotiable criteria were not met.
	7. Addressing Every Standard for Mathematical Practice		Not evaluated. Non-negotiable criteria were not met.
	8. Expressing Mathematical Reasoning		Not evaluated. Non-negotiable criteria were not met.
	9. Constructing Forms Without Cueing Solution Processes		Not evaluated. Non-negotiable criteria were not met.
	10. Calling for Variety in Student Work		Not evaluated. Non-negotiable criteria were not met.
	11. Quality Materials		Not evaluated. Non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: <u>Tier III, Not representing quality</u>			