Assessment Materials Evaluation - Student Standards Review

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

Title: **Common Core Math Test Pack** Grade: **4-5**

Publisher: **Edmentum, Inc.** Copyright: **2014**

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

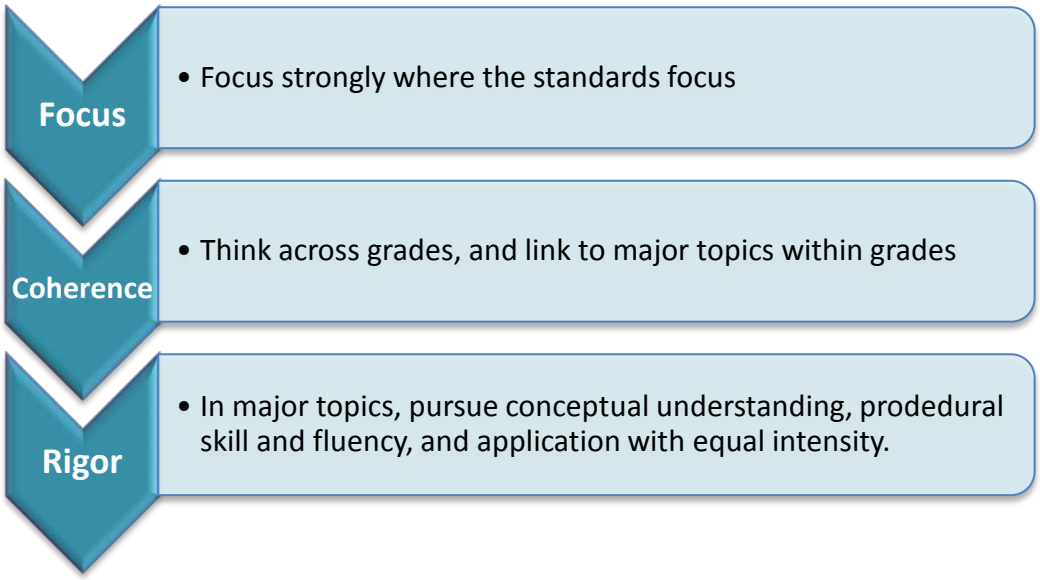
The following two indicators may be impacted:

- 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 "No" for this criterion because it does not meet or exceed the minimum, required score-point distributions for the major work of the grade. The assessments do not meet 75% of the total points aligning exclusively to the major work of the grade.	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 the materials were consistently found to assess the content of the grade level with 90% or more of their items. Over 90% of total items address topics appropriate to grade level state standards	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: **Common Core Math Test Pack** **Grade:** **4-5**

Publisher: **Edmentum, Inc.** **Copyright:** **2014**

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

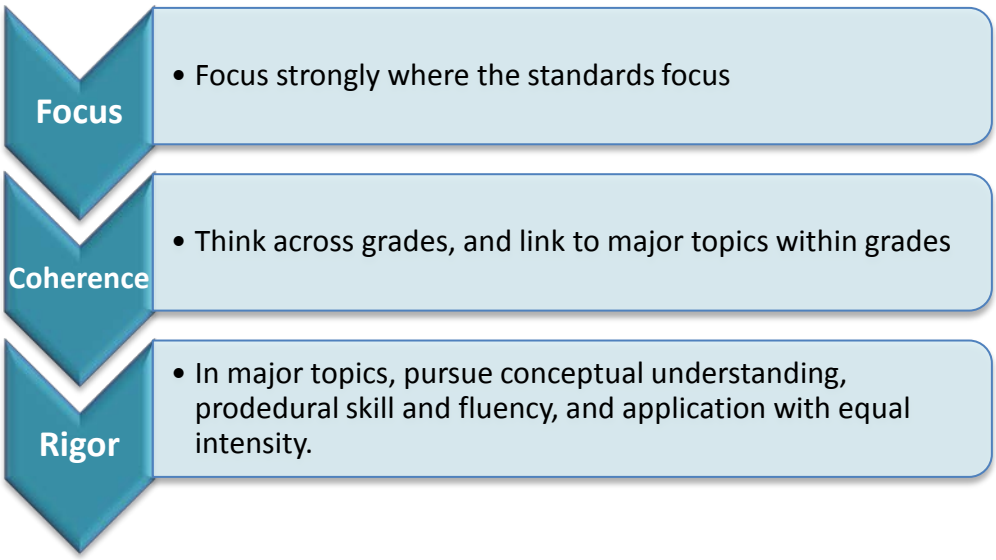
Tier I, Tier II, Tier III Elements of this review:

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

Click below for complete grade-level reviews:

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

Strong mathematics instruction contains the following elements:



Title: **Common Core Test Pack** **Grade:** **4**

Publisher: **Edmentum, Inc.** **Copyright:** **2014**

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**	Although many of the items on each of the three tests seem to reflect the language of the standards, the majority of items are not aligned to individual standards; most items are aligned to domains. Only Items with rubrics are aligned to individual standards.
	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**	Without alignment to standards, it is difficult to determine if individual items are aligned to PARCC's evidence tables. Even without an alignment, however, there are items that do not adhere to the content limitations outlined in the PARCC evidence tables. For example, Question 7 on Test 2 seems to be aligned to 4.OA.C.5. According to the evidence tables, "Tasks do not require students to determine a rule; the rule is given." The question includes the following: "Look at the numbers below and determine the rule for the pattern," so students are required to determine the rule.

[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**	The overall set of items reflects the progressions in the Standards. Grade appropriate content is assessed without content from other grades.
	1d) Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.	**No**	Most items are aligned at the domain level.
	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 4th grade.

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**	These assessments do not meet 75% of the total points aligning exclusively to the major work of the grade. Approximately 61% of the total points align exclusively 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 items on the three assessments address topics from grade 4 of the CCSS.

[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.		

[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.

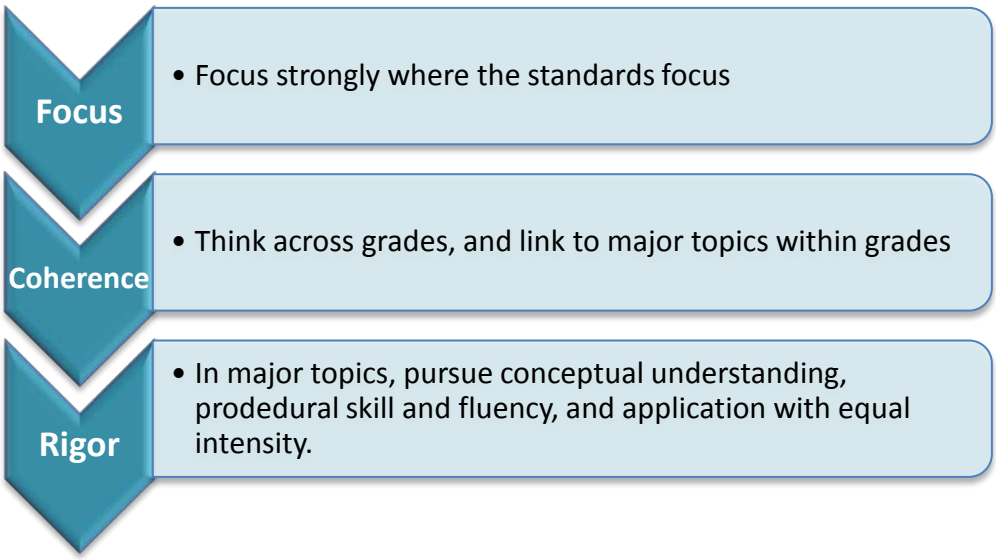
ADDITIONAL INDICATORS OF QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/COMMENTS
SECTION III:ADDITIONAL INDICATORS OF QUALITY		
5. Practice-Content Connections. Each grade/course's assessments include items that meaningfully connect the Standards for Mathematical Content and Standards for Mathematical Practice. 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	**Yes**	The majority of items are not aligned to individual standards; most items are aligned to domains.
	2. Focus on Major Work	**No**	These assessments do not meet 75% of the total points aligning exclusively to the major work of the grade. Approximately 61% of the total points align exclusively to the major work of the grade.
	3. Focus in K-8	**Yes**	Over 90% of items on the three assessments address topics from grade 4 of the CCSS.
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: **Common Core Test Pack** **Grade:** **5**

Publisher: **Edmentum, Inc.** **Copyright:** **2014**

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**	Although many of the items on each of the three tests seem to reflect the language of the standards, the majority of items are not aligned to individual standards; most items are aligned to domains. Only Items with rubrics are aligned to individual standards.
	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**	Without alignment to standards, it is difficult to determine if individual items are aligned to PARCC's evidence tables. Even without an alignment, however, there are items that do not adhere to the content limitations outlined in the PARCC evidence tables. For example, Question 16 on Test 3 seems to be aligned to 5.NBT.B.7. According to the evidence tables, "quotients are either whole numbers or else decimals terminating at the tenths or hundredths place." The question includes the following as a possible answer: "0.021 ÷ 1.0," so students would get a quotient that terminates at the thousandths place.

[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**	The overall set of items reflects 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**	Most items are aligned at the domain level.
	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**	Most items use numbers 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.	**No**	These assessments do not meet 75% of the total points aligning exclusively to the major work of the grade. Approximately 71% of the total points align exclusively 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**	Although over 90% of total items address topics appropriate to grade 6, items are included that address knowledge found in future mathematics courses. For example, Test 1, question 37 requires students to use a rate to solve a problem.

[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.		

[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**	The majority of items are not aligned to individual standards; most items are aligned to domains.
	2. Focus on Major Work	**No**	These assessments do not meet 75% of the total points aligning exclusively to the major work of the grade. Approximately 71% of the total points align exclusively to the major work of the grade.
	3. Focus in K-8	**Yes**	Although over 90% of total items address topics appropriate to grade 5, items are included that address knowledge found in future mathematics courses.
II. Balance	4. Rigor and Balance	**No**	Not evaluated. Non-negotiable criteria were not met.
II: Additional Indicators of Quality	5. Practice-Content Connections	**Yes**	Not evaluated. Non-negotiable criteria were not met.
	6. Assessing Supporting Content	**No**	Not evaluated. Non-negotiable criteria were not met.
	7. Addressing Every Standard for Mathematical Practice	**Yes**	Not evaluated. Non-negotiable criteria were not met.
	8. Expressing Mathematical Reasoning	**No**	Not evaluated. Non-negotiable criteria were not met.
	9. Constructing Forms Without Cueing Solution Processes	**Yes**	Not evaluated. Non-negotiable criteria were not met.
	10. Calling for Variety in Student Work	**Yes**	Not evaluated. Non-negotiable criteria were not met.
	11. Quality Materials	**Yes**	Not evaluated. Non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: <u>Tier III, Not representing quality</u>			