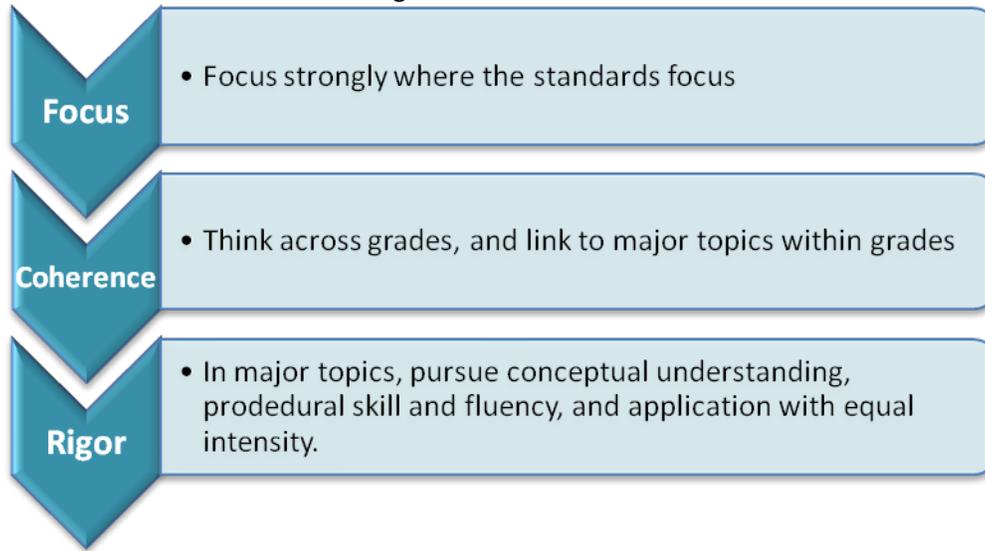


Strong mathematics instruction contains the following elements:



Title: Common Core Math Benchmark Assessments

Grade: Grade 3-5

Publisher: Measured Progress, Inc.

Copyright: 2013

Overall Rating: Tier III, Not representing quality

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

| STRONG | WEAK |
|---|--|
| <u>Alignment of Test Items (Non-Negotiable)</u> | <u>Rigor and Balance</u> |
| <u>Focus on Major Work (Non-Negotiable)*</u> | <u>Practice-Content Connections</u> |
| <u>Focus in K-8 (Non-Negotiable)</u> | <u>Addressing Every Standard for Mathematical Practice</u> |
| <u>Assessing Supporting Content</u> | |
| <u>Expressing Mathematical Reasoning</u> | |
| <u>Constructing Forms Without Cueing Solution Processes</u> | |
| <u>Calling for a Variety in Student Work</u> | |
| <u>Quality Materials</u> | |
| *weak at 4 th grade level | |

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.

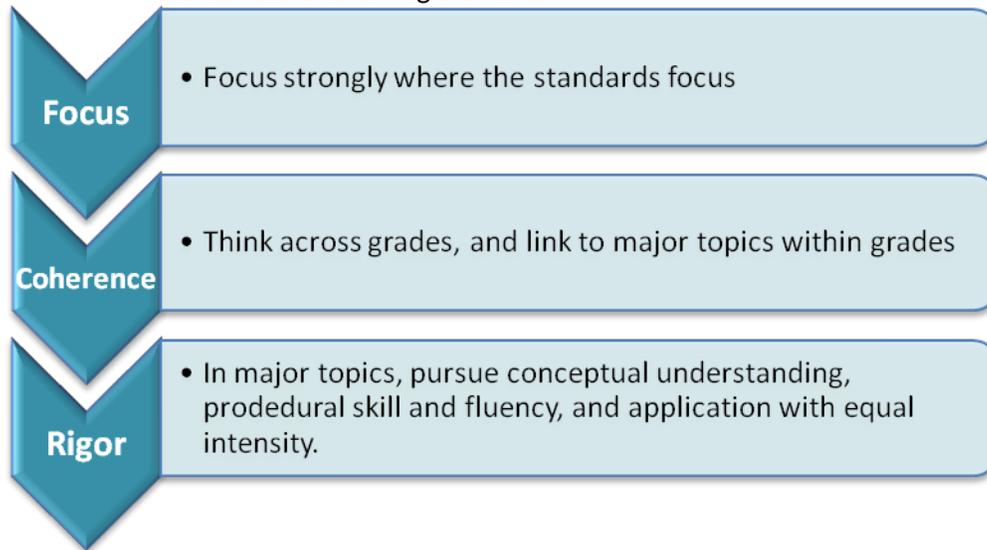
Click below for complete grade-level reviews:

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

[Grade 4 \(Tier 3\)](#)

[Grade 5 \(Tier 3\)](#)

Strong mathematics instruction contains the following elements:



Title: Common Core Math Benchmark Assessments

Grade: Grade 3

Publisher: Measured Progress, Inc.

Copyright: 2013

Overall Rating: Tier III, Not representing quality

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

| STRONG | WEAK |
|--|---|
| Alignment of Test Items (Non-Negotiable) | Rigor and Balance |
| Focus on Major Work (Non-Negotiable) | Practice-Content Connections |
| Focus in K-8 (Non-Negotiable) | Addressing Every Standard for Mathematical Practice |
| Assessing Supporting Content | |
| Expressing Mathematical Reasoning | |
| Constructing Forms Without Cueing Solution Processes | |
| Calling for a Variety in Student Work | |
| Quality Materials | |

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 | | | |
| <p>Non-Negotiable 1. ALIGNMENT OF TEST ITEMS: 90% of test items and/or sets of items exhibit alignment to the full intent of the CCSSM for that grade or course^{1 2} by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s).</p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. All items and/or sets of items should reflect the metric.</i></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> | <p>1a) Items and/or sets of items directly reflect the language of individual standards.</p> <ul style="list-style-type: none"> 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. | Yes | The language of the individual standards is also aligned with the questions. For example, Form A items 4, 8, and 15 target 3.OA.A.1, and these items require interpreting products of whole numbers as required by the standard. |
| | <p>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.</p> | Yes | Not all items are aligned with PARCC'S evidence tables and footnotes of the CCSSM although these items are fewer than 10% of the total items. For example, Form B item 2 includes answer choices with denominators with of 7. Also, Form B item 9 requires an answer with a denominator of 5. |
| | <p>1c) The overall set of items reflect the progressions in the Standards.</p> <ul style="list-style-type: none"> For example, multiplication and division items in grade 3 emphasize equal groups, with no rate problems (grade 6 in CCSS). | Yes | Most items in the overall set of items reflect the progression in the standards. An exception is Item 11 on Form A which emphasizes rate over equal groups. |
| | <p>1d) Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.</p> | Yes | There are items that address individual standards and cluster headings. For example, Form D items 4 and 15 target cluster 3.OA.A. |
| | <p>1e) Using the number system appropriate to the grade level.</p> <ul style="list-style-type: none"> 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 | Each item uses numbers appropriate to grade 3. |

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](#).

| CRITERIA | INDICATORS OF SUPERIOR QUALITY | MEETS METRICS (Y/N) | JUSTIFICATION/COMMENTS |
|--|--|---------------------|---|
| SECTION I (continued): NON-NEGOTIABLE CRITERIA | | | |
| <p>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</p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>*As applicable to the grade level assessment being reviewed.</p> | <p>FOR GRADES K–8 ONLY</p> <p>For grades K–8, each grade/course’s assessments meet or exceed the following score-point distributions for the major work of the grade.</p> <ul style="list-style-type: none"> • 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 | <p>On test Form A, 77% of the total points are aligned exclusively to the major work of grade 3. Test Form B has 91% of the total points aligned exclusively to the major work of grade 3. Test Form C has 82% of the total points aligned exclusively to the major work of grade 3. Test Form D has 77% of the total points aligned exclusively to the major work of grade 3.</p> <p>Overall 82% of the items discuss the major work of the grade.</p> |
| | <p>FOR HIGH SCHOOL ONLY</p> <p>For high school, aligned assessments or sets of assessments meet or exceed the following score-point distribution:</p> <ul style="list-style-type: none"> • 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 | | | |
| <p>Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.⁵</p> <p><i>This criterion applies to fixed form or CAT assessments, whether a summative assessment or a set of interim/benchmark assessments. All items also should reflect the metric.</i></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> | <p>90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level.</p> <p>Commonly misaligned topics include, but are not limited to:</p> <ul style="list-style-type: none"> • 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) | <p>Yes</p> | <p>Each item on the assessment addresses topics found in the CCSSM for grade 3.</p> |

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 | | | |
| <p>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</p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> | <p>4a) For Conceptual Understanding:</p> <ul style="list-style-type: none"> • 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. | Yes | Approximately 36% of the total score-points on the assessment for grade 3 explicitly address standards which require students to demonstrate conceptual understanding of key mathematical concepts (3.OA.B, 3.NF, and 3.G.1). |
| | <p>4b) For Procedural Skill and Fluency:</p> <ul style="list-style-type: none"> • 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. <ul style="list-style-type: none"> • 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 | No | Approximately 8% of the score-points on the assessment for grade 3 explicitly assess procedural skill and fluency as required by 3.OA.C.7 and 3.NBT.A.2. |
| | <p>4c) For Applications</p> <ul style="list-style-type: none"> • 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. | Yes | Over 20% of the total score-points on the assessment for grade 3 explicitly assess solving single and multi-step word problems and simple models. |

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).

| | | | |
|--|--|-----------|---|
| | <p>4d) Grades 3-High School: PARCC Type II and Type III Performance-Based Tasks⁷</p> <ul style="list-style-type: none"> • 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. | No | There are no items that indicate alignment to Subclaim C or Subclaim D. |
|--|--|-----------|---|

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 | | |
| <p>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</p> | No | The Standards for Mathematical Practice are not linked to any items, and there is no mention of them anywhere in the benchmark assessments. |
| <p>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</p> | Yes | Items addressing supporting content support the major work of 3 rd grade although this is not clearly stated. |
| <p>7. Addressing Every Standard for Mathematical Practice. Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course.</p> | No | The Standards for Mathematical Practice are not addressed in the benchmark assessments. |
| <p>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.</p> | Yes | The assessment for grade 3 allows for expressing and/or communicating mathematical reasoning through short answer and constructive response questions. |
| <p>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.</p> | Yes | The assessment does not give the students a cue to use for any of the solutions. |
| <p>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</p> | Yes | Some of the items on the assessments allow for the students to use mathematical models, explanations and diagrams. |
| <p>11. Quality Materials. The assessment items, answer keys, and documentation are free from mathematical errors.</p> | Yes | Based upon our professional knowledge the assessment items, answer keys, and documentation are free from mathematical errors. |

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).

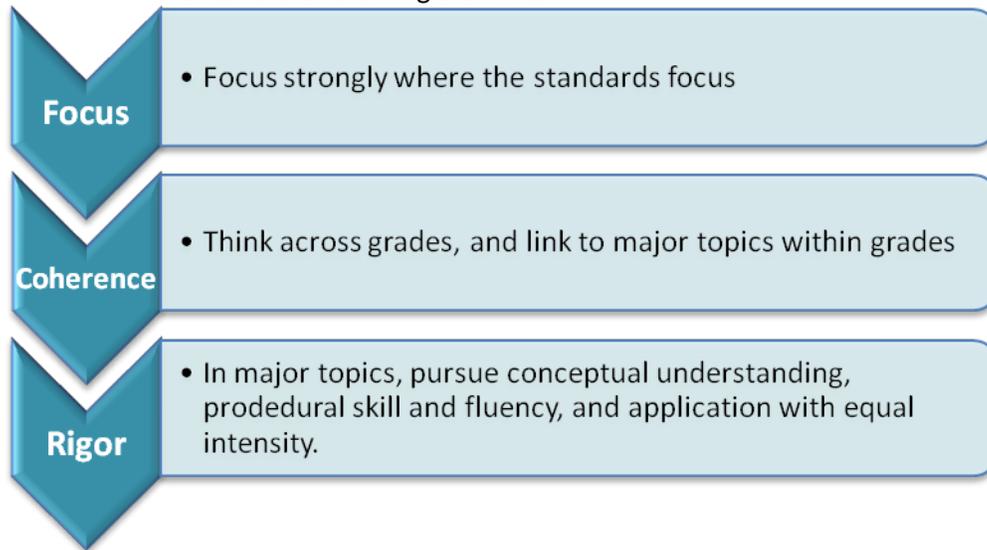
Tier 1 ratings receive a “Yes” in Column 1 for Criteria 1-3, a “Yes” in Column 1 for Criteria 4, and a “Yes” for all additional indicators 5-11.

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 | Not all items are aligned with PARCC’S evidence tables and footnotes of the CCSSM although these items are fewer than 10% of the total items. |
| | 2. Focus on Major Work | Yes | Overall 82% of the items discuss the major work of the grade. |
| | 3. Focus in K-8 | Yes | Each item on the assessment addresses topics found in the standards for grade 4. |
| II. Balance | 4. Rigor and Balance | No | Fluency is lacking, and there are no items that indicate alignment to Subclaim C or Subclaim D. |
| II: Additional Indicators of Quality | 5. Practice-Content Connections | No | The Standards for Mathematical Practice are not linked to any items, and there is no mention of them anywhere in the benchmark assessments. |
| | 6. Assessing Supporting Content | Yes | The evidence table shows the focus and coherence of each item listed on the assessment by placing the standard above each item to prove the alignment of the standard and the major work. |
| | 7. Addressing Every Standard for Mathematical Practice | No | The Standards for Mathematical Practice are not addressed in the benchmark assessments. |
| | 8. Expressing Mathematical Reasoning | Yes | The assessment for grade 3 allows for expressing and/or communicating mathematical reasoning through short answer and constructive response questions. |
| | 9. Constructing Forms Without Cueing Solution Processes | Yes | The assessment does not give the students a cue to use for any of the solutions. |
| | 10. Calling for Variety in Student Work | Yes | Some of the items on the assessments allow for the students to use mathematical models, explanations and diagrams. |
| | 11. Quality Materials | Yes | Based upon our professional knowledge the assessment items, answer keys, and documentation are free from mathematical errors. |
| FINAL DECISION FOR THIS MATERIAL: Tier III, Not representing quality | | | |

Strong mathematics instruction contains the following elements:



Title: Common Core Math Benchmark Assessments

Grade: Grade 4

Publisher: Measured Progress, Inc.

Copyright: 2013

Overall Rating: Tier III, Not representing quality

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

| STRONG | WEAK |
|--|---|
| Alignment of Test Items (Non-Negotiable) | Focus on Major Work (Non-Negotiable) |
| Focus in K-8 (Non-Negotiable) | Rigor and Balance |
| Assessing Supporting Content | Practice-Content Connections |
| Expressing Mathematical Reasoning | Addressing Every Standard for Mathematical Practice |
| Constructing Forms Without Cueing Solution Processes | |
| Calling for a Variety in Student Work | |
| Quality Materials | |

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 | | | |
| <p>Non-Negotiable 1. ALIGNMENT OF TEST ITEMS: 90% of test items and/or sets of items exhibit alignment to the full intent of the CCSSM for that grade or course^{1 2} by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s).</p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. All items and/or sets of items should reflect the metric.</i></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> | <p>1a) Items and/or sets of items directly reflect the language of individual standards.</p> <ul style="list-style-type: none"> 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. | Yes | The language of the individual standards is not always aligned with the questions although these items are fewer than 10% of the total items. For example, Form A item 12 and Form B items 1 and 12 target 4.NBT.A.1. This standard requires that students “recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.” Form A item 12 and Form B item 1 simply require students to select the value of a digit in a multi-digit number, and Form B item 12 has students order 3 multi-digit numbers. |
| | <p>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.</p> | Yes | Items are aligned with PARCC’S evidence tables and footnotes of the CCSSM. For example, no items with denominators that are not 2, 3, 4, 5 ,6, 8, 10, 12, or 100 are included. |
| | <p>1c) The overall set of items reflect the progressions in the Standards.</p> <ul style="list-style-type: none"> 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 progression in the standards |
| | <p>1d) Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.</p> | Yes | There are items that address individual standards and cluster headings. For example, Form C items 11 and 12 target cluster 4.NF.B. |

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](#).

| | | | |
|--|--|------------|--|
| | <p>1e) Using the number system appropriate to the grade level.</p> <ul style="list-style-type: none">• 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 | Each item uses numbers appropriate to grade 4. |
|--|--|------------|--|

| CRITERIA | INDICATORS OF SUPERIOR QUALITY | MEETS METRICS (Y/N) | JUSTIFICATION/COMMENTS |
|--|--|---------------------|--|
| SECTION I (continued): NON-NEGOTIABLE CRITERIA | | | |
| <p>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</p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>*As applicable to the grade level assessment being reviewed.</p> | FOR GRADES K–8 ONLY | No | <p>On test Form A, 68% of the total points are aligned exclusively to the major work of grade 4. Test Form B has 77% of the total points that are aligned exclusively to the major work of grade 4. Test Form C has 82% of the total points aligned exclusively to the major work of grade 4. Test Form D has 59% of the total points aligned exclusively to the major work of grade 4.</p> <p>Overall 72% of the items discuss the major work of the grade.</p> |
| | <p>For grades K–8, each grade/course’s assessments meet or exceed the following score-point distributions for the major work of the grade.</p> <ul style="list-style-type: none"> • 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. | | |
| | FOR HIGH SCHOOL ONLY | | |
| <p>For high school, aligned assessments or sets of assessments meet or exceed the following score-point distribution:</p> <ul style="list-style-type: none"> • 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 | | | |
| <p>Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.⁵</p> <p><i>This criterion applies to fixed form or CAT assessments, whether a summative assessment or a set of interim/benchmark assessments. All Items also should reflect the metric.</i></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> | <p>90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level.</p> <p>Commonly misaligned topics include, but are not limited to:</p> <ul style="list-style-type: none"> • 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) | <p>Yes</p> | <p>Each item on the assessment addresses topics found in the CCSSM for grade 4.</p> |

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 | | | |
| <p>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</p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> | <p>4a) For Conceptual Understanding:</p> <ul style="list-style-type: none"> 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. | Yes | Approximately 32% of the total score-points on the assessment for grade 4 explicitly address standards which require students to demonstrate conceptual understanding of key mathematical concepts (4.NF). |
| | <p>4b) For Procedural Skill and Fluency:</p> <ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> 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 | No | Approximately 6% of the score-points on the assessment for grade 4 explicitly assess procedural skill and fluency as required by 4.NBT.B.4. |
| | <p>4c) For Applications</p> <ul style="list-style-type: none"> 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. | Yes | Over 20% of the total score-points on the assessment for grade 4 explicitly assess solving single and multi-step word problems and simple models. |

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).

| | | | |
|--|---|-----------|---|
| | <p>4d) Grades 3-High School: PARCC Type II and Type III Performance-Based Tasks ⁷</p> <ul style="list-style-type: none"> • 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. | No | There are no items that indicate alignment to Subclaim C or Subclaim D. |
|--|---|-----------|---|

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 | No | The Standards for Mathematical Practice are not linked to any items, and there is no mention of them anywhere in the benchmark assessments. |
| 6. Assessing Supporting Content. Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course. ⁹ | Yes | Items addressing supporting content support the major work of 4 th grade although this is not clearly stated. |
| 7. Addressing Every Standard for Mathematical Practice. Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course. | No | The Standards for Mathematical Practice are not addressed in the benchmark assessments. |
| 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. | Yes | The assessment for grade 4 allows for expressing and/or communicating mathematical reasoning through short answer and constructive response questions. |
| 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. | Yes | The assessment does not give the students a cue to use for any of the solutions. |
| 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 | Yes | Some of the items on the assessments allow for the students to use mathematical models, explanations and diagrams. |
| 11. Quality Materials. The assessment items, answer keys, and documentation are free from mathematical errors. | Yes | Based upon our professional knowledge the assessment items, answer keys, and documentation are free from mathematical errors. |

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).

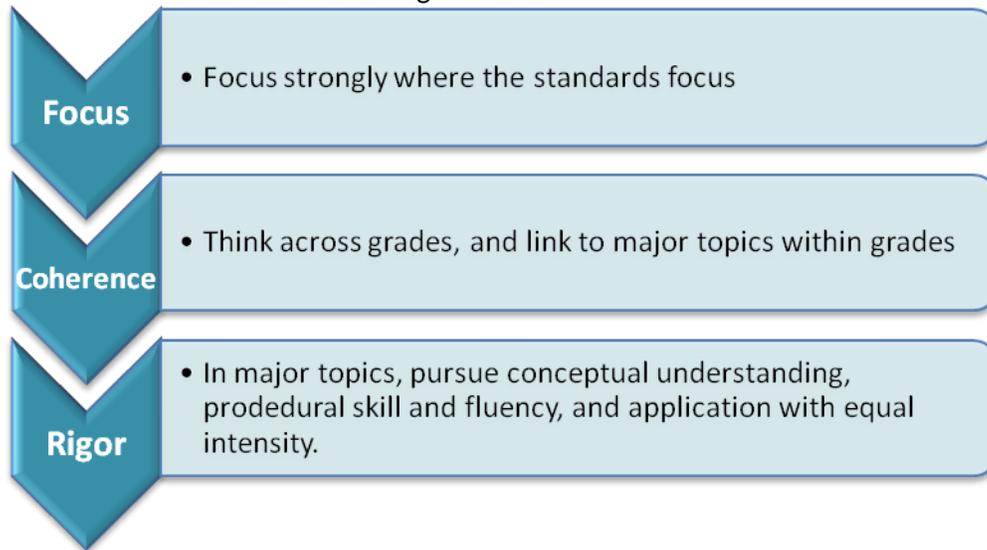
Tier 1 ratings receive a “Yes” in Column 1 for Criteria 1-3, a “Yes” in Column 1 for Criteria 4, and a “Yes” for all additional indicators 5-11.

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 language of the individual standards is not always aligned with the questions although these items are fewer than 10% of the total items. For example, see Form A item 12 and Form B items 1 and 12 targeting 4.NBT.A.1. |
| | 2. Focus on Major Work | No | Overall 72% of the items discuss the major work of the grade. |
| | 3. Focus in K-8 | Yes | Each item on the assessment addresses topics found in the standards for grade 4. |
| II. Balance | 4. Rigor and Balance | No | Fluency is lacking, and there are no items that indicate alignment to Subclaim C or Subclaim D. |
| II: Additional Indicators of Quality | 5. Practice-Content Connections | No | The Standards for Mathematical Practice are not linked to any items, and there is no mention of them anywhere in the benchmark assessments. |
| | 6. Assessing Supporting Content | Yes | The evidence table shows the focus and coherence of each item listed on the assessment by placing the standard above each item to prove the alignment of the standard and the major work. |
| | 7. Addressing Every Standard for Mathematical Practice | No | The Standards for Mathematical Practice are not addressed in the benchmark assessments. |
| | 8. Expressing Mathematical Reasoning | Yes | The assessment for grade 4 allows for expressing and/or communicating mathematical reasoning through short answer and constructive response questions. |
| | 9. Constructing Forms Without Cueing Solution Processes | Yes | The assessment does not give the students a cue to use for any of the solutions. |
| | 10. Calling for Variety in Student Work | Yes | Some of the items on the assessments allow for the students to use mathematical models, explanations and diagrams. |
| | 11. Quality Materials | Yes | Based upon our professional knowledge the assessment items, answer keys, and documentation are free from mathematical errors. |
| FINAL DECISION FOR THIS MATERIAL: <u>Tier III, Not representing quality</u> | | | |

Strong mathematics instruction contains the following elements:



Title: Common Core Math Benchmark Assessments

Grade: Grade 5

Publisher: Measured Progress, Inc.

Copyright: 2013

Overall Rating: Tier III, Not representing quality

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

| STRONG | WEAK |
|--|---|
| Alignment of Test Items (Non-Negotiable) | Rigor and Balance |
| Focus on Major Work (Non-Negotiable) | Practice-Content Connections |
| Focus in K-8 (Non-Negotiable) | Addressing Every Standard for Mathematical Practice |
| Assessing Supporting Content | |
| Expressing Mathematical Reasoning | |
| Constructing Forms Without Cueing Solution Processes | |
| Calling for a Variety in Student Work | |
| Quality Materials | |

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 | | | |
| <p>Non-Negotiable 1. ALIGNMENT OF TEST ITEMS: 90% of test items and/or sets of items exhibit alignment to the full intent of the CCSSM for that grade or course^{1,2} by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s).</p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. All items and/or sets of items should reflect the metric.</i></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> | <p>1a) Items and/or sets of items directly reflect the language of individual standards.</p> <ul style="list-style-type: none"> 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. | Yes | The language of the individual standards is also aligned with the questions. For example, Form D items 6, 8, 17, and 19 target 5.OA.A.2, and these items require interpreting numerical expressions without evaluating them as required by the standard. |
| | <p>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.</p> | Yes | Items are aligned with PARCC'S evidence tables and footnotes of the CCSSM. For example, no items requiring division of fractions by fractions are included. |
| | <p>1c) The overall set of items reflect the progressions in the Standards.</p> <ul style="list-style-type: none"> 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 progression in the standards |
| | <p>1d) Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.</p> | Yes | There are items that address individual standards and cluster headings. For example, Form A item 22 targets cluster 5.NF.A. |
| | <p>1e) Using the number system appropriate to the grade level.</p> <ul style="list-style-type: none"> 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 | Each item uses numbers appropriate to grade 5. |

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](#).

| CRITERIA | INDICATORS OF SUPERIOR QUALITY | MEETS METRICS (Y/N) | JUSTIFICATION/COMMENTS |
|--|--|---------------------|---|
| SECTION I (continued): NON-NEGOTIABLE CRITERIA | | | |
| <p>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</p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>*As applicable to the grade level assessment being reviewed.</p> | FOR GRADES K–8 ONLY | Yes | <p>On test Form A, 100% of the total points are aligned exclusively to the major work of grade 5. Test Form B has 100% of the total points aligned exclusively to the major work of grade 5. Test Form C has 77% of the total points aligned exclusively to the major work of grade 5. Test Form D has 50% of the total points aligned exclusively to the major work of grade 5.</p> <p>Overall 82% of the items discuss the major work of the grade.</p> |
| | <p>For grades K–8, each grade/course’s assessments meet or exceed the following score-point distributions for the major work of the grade.</p> <ul style="list-style-type: none"> • 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. | | |
| | FOR HIGH SCHOOL ONLY | | |
| <p>For high school, aligned assessments or sets of assessments meet or exceed the following score-point distribution:</p> <ul style="list-style-type: none"> • 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 | | | |
| <p>Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.⁵</p> <p><i>This criterion applies to fixed form or CAT assessments, whether a summative assessment or a set of interim/benchmark assessments. All Items also should reflect the metric.</i></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> | <p>90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level.</p> <p>Commonly misaligned topics include, but are not limited to:</p> <ul style="list-style-type: none"> • 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) | <p>Yes</p> | <p>Each item on the assessment addresses topics found in the CCSSM for grade 5.</p> |

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 | | | |
| <p>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</p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> | <p>4a) For Conceptual Understanding:</p> <ul style="list-style-type: none"> 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. | No | Approximately 13% of the total score-points on the assessment for grade 5 explicitly address standards which require students to demonstrate conceptual understanding of key mathematical concepts (5.NBT.A and 5.G.B.3). |
| | <p>4b) For Procedural Skill and Fluency:</p> <ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> 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 | No | Approximately 10% of the score-points on the assessment for grade 5 explicitly assess procedural skill and fluency as required by 5.NBT.B.5. |
| | <p>4c) For Applications</p> <ul style="list-style-type: none"> 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. | Yes | Over 20% of the total score-points on the assessment for grade 5 explicitly assess solving single and multi-step word problems and simple models. |

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).

| | | | |
|--|---|-----------|---|
| | <p>4d) Grades 3-High School: PARCC Type II and Type III Performance-Based Tasks ⁷</p> <ul style="list-style-type: none"> • 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. | No | There are no items that indicate alignment to Subclaim C or Subclaim D. |
|--|---|-----------|---|

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 | No | The Standards for Mathematical Practice are not linked to any items, and there is no mention of them anywhere in the benchmark assessments. |
| 6. Assessing Supporting Content. Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course. ⁹ | Yes | Items addressing supporting content support the major work of 5 th grade although this is not clearly stated. |
| 7. Addressing Every Standard for Mathematical Practice. Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course. | No | The Standards for Mathematical Practice are not addressed in the benchmark assessments. |
| 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. | Yes | The assessment for grade 5 allows for expressing and/or communicating mathematical reasoning through short answer and constructive response questions. |
| 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. | Yes | The assessment does not give the students a cue to use for any of the solutions. |
| 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 | Yes | Some of the items on the assessments allow for the students to use mathematical models, explanations and diagrams. |
| 11. Quality Materials. The assessment items, answer keys, and documentation are free from mathematical errors. | Yes | Based upon our professional knowledge the assessment items, answer keys, and documentation are free from mathematical errors. |

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 the test items exhibit alignment to the full intent of the CCSSM for grade 5. |
| | 2. Focus on Major Work | Yes | Overall 82% of the items discuss the major work of the grade. |
| | 3. Focus in K-8 | Yes | Each item on the assessment addresses topics found in the standards for grade 5. |
| II. Balance | 4. Rigor and Balance | No | Conceptual understanding and fluency are lacking, and there are no items that indicate alignment to Subclaim C or Subclaim D. |
| II: Additional Indicators of Quality | 5. Practice-Content Connections | No | The Standards for Mathematical Practice are not linked to any items, and there is no mention of them anywhere in the benchmark assessments. |
| | 6. Assessing Supporting Content | Yes | The evidence table shows the focus and coherence of each item listed on the assessment by placing the standard above each item to prove the alignment of the standard and the major work. |
| | 7. Addressing Every Standard for Mathematical Practice | No | The Standards for Mathematical Practice are not addressed in the benchmark assessments. |
| | 8. Expressing Mathematical Reasoning | Yes | The assessment for grade 5 allows for expressing and/or communicating mathematical reasoning through short answer and constructive response questions. |
| | 9. Constructing Forms Without Cueing Solution Processes | Yes | The assessment does not give the students a cue to use for any of the solutions. |
| | 10. Calling for Variety in Student Work | Yes | Some of the items on the assessments allow for the students to use mathematical models, explanations and diagrams. |
| | 11. Quality Materials | Yes | Based upon our professional knowledge the assessment items, answer keys, and documentation are free from mathematical errors. |
| FINAL DECISION FOR THIS MATERIAL: Tier III, Not representing quality | | | |