



EdReports.org Quality Instructional Materials Tool: Grades K–8 Mathematics

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Introduction

The Common Core State Standards (CCSS), informed by three decades of knowledge around learning, create an unprecedented opportunity to improve student achievement nationwide. However, simply adopting the Common Core and working with teachers on the instructional shifts—as over 40-plus states are doing—will not directly translate into student success. Evidence indicates that instructional materials have a significant effect on student outcomes.¹ And as Harvard’s Richard Elmore argues, to get inside the instructional core and improve learning at scale, it is essential to get quality content into the hands of teachers and students.²

If quality instructional materials (e.g., textbooks, curriculum, digital resources and other instructional content) are as critical as the research suggests, local decisions about what CCSS materials to adopt or purchase are now more significant than ever. Publishers are updating their materials, independent curriculum providers are launching and teachers nationwide are generously publishing their own materials for the benefit of others. States, districts and organizations also have been developing and disseminating Common Core-aligned lessons. With so many new and repackaged instructional products being introduced into a quickly changing marketplace, state and district leaders and educators need independent information about instructional materials in order to make informed purchasing decisions and, over time, to move the needle on student performance.

[About EdReports.org](#)

Our Vision: All students and teachers in the United States will have access to the highest-quality instructional materials that will help improve student learning outcomes.

Our Mission: EdReports.org, a nonpartisan, independent nonprofit of educators, for educators, will increase the capacity of teachers, administrators and leaders across the country to seek, develop and demand high-quality instructional materials. EdReports.org’s extensive and transparent reviews of existing instructional materials, including user feedback and technical assistance to schools and districts, will ensure teachers are equipped with excellent materials nationwide.

Our Theory of Action: Credible information against quality criteria in a quickly changing marketplace helps educators make better purchasing decisions and improve student performance. Identifying excellence and improving demand for credible information will improve the supply of quality materials over time, leading to better student achievement outcomes.

[About This Tool](#)

EdReports.org has developed this tool to provide educators, stakeholders and leaders with independent and useful information about the quality of instructional materials (whether digital, traditional textbook or blended) from those who will be using them in classrooms. Expert educators will use the tool to evaluate yearlong sets of instructional materials in mathematics against non-negotiable criteria (see Figure 1). The tool builds on the experience of educators, curriculum experts and leading rubric developers and organizations – such as Achieve, Inc., the Council of Great City Schools, the Dana

¹ G. Whitehurst. “Don’t Forget Curriculum.” *Brown Center Letters on Education*. (Washington, DC: Brookings Institute, 2009); M. Chingos and G. Whitehurst. *Choosing Blindly: Instructional Materials, Teacher Effectiveness and the Common Core*. (Washington, DC: Brown Center on Education Policy at Brookings, April 2012).

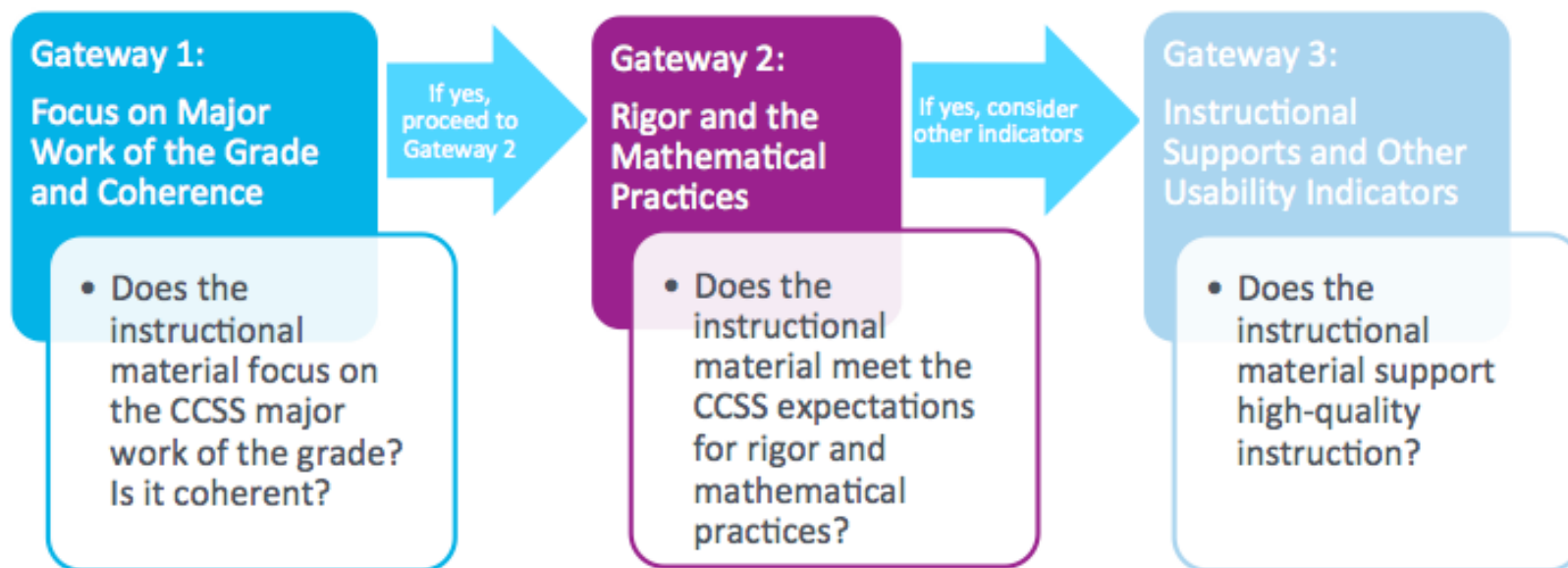
² Richard Elmore, in his work on the instructional core, asserts that there are three ways to improve student learning at scale: (1) raise the level of content that students are taught; (2) increase the skill and knowledge that teachers bring to the teaching of that content; and (3) increase the level of students’ active learning of that content. R. Elmore. *Improving the Instructional Core* (Cambridge, MA: Harvard Graduate School of Education, 2008).

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Center, Illustrative Mathematics Project, the National Council of Teachers of Mathematics and Student Achievement Partners, among others – that have conducted reviews of instructional materials, lessons and tasks.

To create the evaluation tool, EdReports.org conducted research into the use of more than 11 commonly-used rubrics, observed review processes and trainings for Achieve and the state of Tennessee, gathered input from more than 500 educators during a nationwide listening tour on criteria and rubrics, and convened an Anchor Educator Working Group (AEWG) of expert practitioners to inform the creation of the instrument. The tool will be refined by the AEWG after the first set of reviews is complete. The tool has three major gateways (see Figure 1) to guide the evaluation process. Reviewers will apply the three gateways sequentially to ensure EdReports.org reports to the field the extent to which materials are CCSS-aligned and usable by educators. Only those materials that meet the expectations for Gateway 1 (CCSS Focus and Coherence) will move to Gateway 2. Only those that meet the expectations for Gateway 2 (Rigor and Mathematical Practices) will move to Gateway 3 (Usability Indicators).

Figure 1: Gateway Evaluation Process for Review of Mathematics Materials



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Instructions for Conducting High Quality Reviews

Using the Tool and Toolkit: Reference Materials to Support Quality Reviews

In addition to the [EdReports.org Quality Instructional Materials Tool: Grades K–8 Mathematics](#), reviewers have a toolkit with the following materials as references for reviews:

- [K–8 Publishers' Criteria for the Common Core State Standards for Mathematics \(Spring 2013\)](#)
- [Focus by Grade Level Documents](#)
- Evidence Guidelines (technical documentation support indicating how to collect evidence and where to find evidence)
- Standards for Mathematical Practices: Commentary and Elaborations [for K-5](#) (Feb 2014) and [for 6-8](#) (May 2014)

How to Apply Ratings Using the Evaluation Tool in 4 Steps

STEP 1: Review the Criteria and Indicators for each Gateway

- Each Gateway consists of a number of Criteria and Indicators. Criteria in Gateways 1 and 2 refer to Alignment (focus, coherence, rigor and mathematical practices). Criteria in Gateway 3 refer to Usability.
- Reviewers must provide a rating according to the numerical rating options provided for each Indicator and must cite concrete evidence to justify the rating. Reviewers document evidence, including page numbers, lesson names, unit topics, etc., in an evidence collection workbook.

| CRITERION | INDICATORS | RATING | EVIDENCE |
|--|---|--------|----------|
| Rigor and Balance: Each grade's instructional materials 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. ¹⁶ | 2a. Attention to Conceptual Understanding: Materials develop conceptual understanding of key mathematical concepts, especially where called for in specific content standards or cluster headings. | 0 1 2 | |
| | 2b. Attention to Procedural Skill and Fluency: Materials give attention throughout the year to individual | 0 1 2 | |

STEP 2: Rate each Indicator

- Reviewers will evaluate instructional materials against each Indicator using the following rating scale:
 - 2 – A rating of 2 means that the materials **meet the full intention** of the Indicator.
 - 1 – A rating of 1 means that the materials **partially meet the intention** of the Indicator.
 - 0 – A rating of 0 means that the materials **do not meet the intention** of the Indicator.

STEP 3: Determine the Criterion Rating

- An overall rating for each Criterion is determined by adding the total points earned from the Criterion's Indicators.
- Once the total from the Indicators is added, select the Rating (e.g., Meets expectations, partially meets, etc.) based on where the point total falls (see sample below).

Sample Criterion Rating

| CRITERION | INDICATORS | RATING | EVIDENCE |
|---|--|---------------------|--|
| <p>Rigor and Balance: Each grade’s instructional materials 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.³</p> <p>Earned: ____ of 8 points</p> <p><input checked="" type="checkbox"/> Meets expectations (7-8 points)</p> <p><input type="checkbox"/> Partially meets expectations (5-6 points)</p> <p><input type="checkbox"/> Does not meet expectations (<5 points)</p> | <p>2a. Attention to Conceptual Understanding: Materials develop conceptual understanding of key mathematical concepts, especially where called for in specific content standards or cluster headings.</p> | <p>0 1 2</p> | <p>Sample Calculation of Criterion</p> <p>1) Add the points earned from the Indicators that were reviewed for that Criterion</p> <ul style="list-style-type: none"> • Example: 2 + 1 + 2 + 2 = 7 points <p>2) Determine the overall rating by using the point scale provided under the Criterion</p> <ul style="list-style-type: none"> • Example: 7 points earns a ‘Meets expectations’ because 7 points falls within the range of 7-8 points. |
| | <p>2b. Attention to Procedural Skill and Fluency: Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency.</p> | <p>0 1 2</p> | |
| | <p>2c. Attention to Applications: Materials are designed so that teachers and students spend sufficient time working with engaging applications of the mathematics, without losing focus on the major work of each grade.</p> | <p>0 1 2</p> | |
| | <p>2d. Balance: The three aspects of rigor are not always treated together and are not always treated separately. There is a balance of the 3 aspects of rigor within the grade.</p> | <p>0 1 2</p> | |

STEP 4: Determine the Final Gateway Rating

- The scoring from each Criterion is added to determine a final Gateway score. Gateway scores are determined using the same rating scale as earlier.

³ Refer also to Criterion #4 (page 10) in the Publisher’s Criteria.

Sample Gateway Rating

Overall Gateway 2 Rating: Rigor and Mathematical Practices

- Reviewers should use data recorded in each Rating Sheet to determine the Gateway 2 final rating.

| | CRITERIA | RATING SCORE |
|--|---|---|
| <p>GATEWAY 2: RIGOR AND MATHEMATICAL PRACTICES: The materials align with CCSS expectations for rigor and mathematical practices.</p> <p>Earned: 17 of 18 points</p> <p><input checked="" type="checkbox"/> Meets expectations (16-18 points)</p> <p><input type="checkbox"/> Partially meets expectations (11-14 points)</p> <p><input type="checkbox"/> Does not meet expectations (<11 points)</p> | <p>2a-2d. Each grade’s instructional materials 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.</p> | <p>Point Totals from Rating Sheet(s):</p> <p style="font-size: 2em; color: #e91e63; text-align: center;">7</p> |
| | <p>2e-2g. Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice.</p> | <p>Point Totals from Rating Sheet(s):</p> <p style="font-size: 2em; color: #e91e63; text-align: center;">10</p> |

Sample Calculation of Gateway

- Determine the total points possible for each Gateway by adding the total possible points from each Criterion under that Gateway.
 - Example: Gateway 2 can earn a total of 18 points. To attain ‘Meets expectations’ for this Gateway, the instructional material must receive 16-18 points.
- Determine the number of points earned from each of the Indicators under the Gateway being scored.
 - Example: In this case, criteria 2a-2d earned 7 points and criteria 2e-2g earned 10 points.
- Determine the overall rating by using the point scale provided for that Gateway.
 - Example: The total points *possible* for this Gateway= 18; the total points *earned*= 17; therefore, the overall rating for this Gateway is ‘Meets expectations.’

MATERIALS MUST MEET EXPECTATIONS FOR GATEWAY 2 TO MOVE ON TO GATEWAY 3.

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Evaluation Tool

Background Information

MATERIALS REVIEW

Reviewer Name: _____

Date: _____

Title of Instructional Material: _____

ISBN: _____

Grade: _____

Publisher: _____

Edition Year: _____

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Gateway 1: Focus on Major Work of the Grade and Coherence

- *Does the instructional material focus on the “major work of the grade”?*
- *Is the sequence in which the topics are covered consistent with the logical structure of mathematics?*

Rating Sheet 1: Materials focus in K-8

- For ‘Materials focus in K-8’ to attain a score of ‘Meets Expectations,’ material must earn at least 2 points.
- To meet expectations for Rating Sheet 1, the **grade level being reviewed must meet the criterion.**

| CRITERION | INDICATORS | RATING | EVIDENCE |
|---|---|-----------------|----------|
| Materials do not assess topics before the grade level in which the topic should be introduced. ⁴ Earned: ____ of 2 points <input type="checkbox"/> Meets expectations (2 points) <input type="checkbox"/> Does not meet expectations (0 points) | 1a. The instructional material assesses* the grade-level content and, if applicable, content from earlier grades. *Content from future grades may be introduced but students should not be held accountable on assessments for future expectations. | 0 2 | |

⁴ Grade level mathematics content as indicated in Common Core State Standards for Mathematics. <http://www.corestandards.org/>

Rating Sheet 2: Materials focus on the major clusters⁵ of each grade

- For ‘Materials focus on the major clusters of each grade’ to attain a score of ‘Meets Expectations,’ materials should devote **the large majority** of class time to the major work of each grade. Any coverage of additional or supporting clusters or other content should *support* the major work of the grade.
- To meet expectations for Rating Sheet 2, the **grade level being reviewed must meet the criterion.**

| CRITERION | INDICATORS | RATING | EVIDENCE |
|--|--|-------------------------|----------|
| <p>Students and teachers using the materials as designed devote the large majority⁶ of class time in each grade K–8 to the major work of the grade.⁷</p> <p>Earned: _____ of 4 points</p> <p><input type="checkbox"/> Meets expectations (4 points)</p> <p><input type="checkbox"/> Does not meet expectations (0 points)</p> | <p>1b. Instructional material spends the majority of class time on the major cluster of each grade.</p> | <p>0 4*</p> | |

**This indicator differs from others in that its score will either be a ‘0’ or ‘4’. This approach to scoring reflects the primary importance of focus in determining aligned instructional materials. Materials must be written such that they spend the majority of class time on the major work of each grade. Thus, the instructional material must meet this alignment expectation and indicator in order to pass through Gateway 1.*

⁵ The Cluster Headings are assigned an uppercase letter (A, B, C...). For example, if a Domain has four clusters, then A is assigned to the first cluster, B to the second, C to the third, and D to the fourth cluster. See page 10 for a listing of the major and supporting clusters.

⁶ The materials should devote at least 65% and up to approximately 85% of class time to the major work of the grade with Grades K–2 nearer the upper end of that range, i.e., 85%. However, 65%-85% should be viewed as a guideline for reviewers. Reviewers should use their judgment about materials on the borderline (e.g., 64%) and note specifics in the Evidence area.

⁷ Refer also to Table 1 (page 9) in the Publisher’s Criteria.

| FOCUS COMPONENT 2: MAJOR CLUSTERS OF EACH GRADE | | | | | |
|---|------------------|---|--------------------|----------------|---|
| QUALITY INDICATORS | MAJOR CLUSTERS | ADDITIONAL OR SUPPORTING CLUSTERS OR OTHER ⁸ | QUALITY INDICATORS | MAJOR CLUSTERS | ADDITIONAL OR SUPPORTING CLUSTERS OR OTHER ⁹ |
| Kindergarten | K.CC: A, B, C | K.MD: A, B | Grade 5 | 5.NBT: A, B | 5.OA: A, B |
| | K.OA: A | K.G: A, B | | 5.NF: A, B | 5.MD: A, B |
| | K.NBT: A | | | 5.MD: C | 5.G: A, B |
| | | | | | |
| Grade 1 | 1.OA: A, B, C, D | 1.MD: B, C | Grade 6 | 6.RP: A | 6.NS: B |
| | 1.NBT: A, B, C | 1.G: A | | 6.NS: A, C | 6.G: A |
| | 1.MD: A | | | 6.EE: A, B, C | 6.SP: A, B |
| | | | | | |
| Grade 2: | 2.OA: A, B | 2.OA: C | Grade 7 | 7.RP: A | 7.G: A, B |
| | 2.NBT: A, B | 2.MD: C, D | | 7.NS: A | 7.SP: A, B, C |
| | 2.MD: A, B | 2.G: A | | 7.EE: A, B | OTHER |
| | | | | | |
| Grade 3 | 3.OA: A, B, C, D | 3.NBT: A | Grade 8 | 8.EE: A, B, C | 8.NS: A |
| | 3.NF: A | 3.MD: B, D | | 8.F: A, B | 8.G: C |
| | 3.MD: A, C | 3.G: A | | 8.G: A, B | 8.SP: A |
| | | | | | |
| Grade 4 | 4.OA: A | 4.OA: B, C | | | |
| | 4.NBT: A, B | 4.MD: A, B, C | | | |
| | 4.NF: A, B, C | 4.G: A | | | |
| | | | | | |

⁸ Other signifies content that is found in other grades of the CCSSM or that is not part of the CCSSM.

⁹ Other signifies content that is found in other grades of the CCSSM or that is not part of the CCSSM.

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Rating Sheet 3: Coherence

- For 'Coherence' to attain a score of 'Meets Expectations,' material must earn at least 7 points.

| CRITERION | INDICATORS | RATING | EVIDENCE |
|--|--|---------|----------|
| <p>Coherence: Each grade's instructional materials are coherent and consistent with the Standards.</p> <p>Earned: ____ of 8 points</p> <p><input type="checkbox"/> Meets expectations (7-8 points)</p> <p><input type="checkbox"/> Partially meets expectations (5-6 points)</p> <p><input type="checkbox"/> Does not meet expectations (<5 points)</p> | 1c. Supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade. ¹⁰ | 0 1 2* | |
| | 1d. The amount of content designated for one grade level is viable for one school year in order to foster coherence between grades. | 0 1 2 | |
| | 1e. Materials are consistent with the progressions in the Standards. ¹¹ | | |
| | i. Materials develop according to the grade-by-grade progressions in the Standards. If there is content from prior or future grades, that content is clearly identified and related to grade-level work. | 0 1 2** | |
| | ii. Materials give all students extensive work with grade-level problems. | | |
| | iii. Materials relate grade level concepts explicitly to prior knowledge from earlier grades. | | |
| | 1f. Materials foster coherence through connections at a single grade, where appropriate and required by the Standards. ¹² | | |
| | i. Materials include learning objectives that are visibly shaped by CCSSM cluster headings. | 0 1 2** | |
| ii. Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important. | | | |

*This Rating Sheet allows for reviewers to identify Indicators that 'Do Not Meet Expectations' (0); 'Partially Meet Expectations' (1); and 'Meet Expectations' (2).

** For Indicators 1e and 1f, evidence of each sub-indicator must be provided although the reviewer will determine one score for all indicators.

¹⁰ Refer also to Criterion #3 (page 5) in the Publisher's Criteria.

¹¹ Refer also to Table 1 (page 9) in the Publisher's Criteria.

¹² Refer also to Criterion #6 (page 13) in the Publisher's Criteria.

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Overall Gateway 1 Rating: Focus on Major Work of the Grade and Coherence

- Reviewers should use data recorded in Rating Sheets 1, 2, and 3 to determine the Gateway 1 final rating.

| | CRITERIA | RATING SCORE | EVIDENCE |
|---|--|--|----------|
| <p>GATEWAY 1: FOCUS ON MAJOR WORK¹³ and COHERENCE: Students and teachers using the materials as designed devote the large majority¹⁴ of time in each grade K–8 to the major work of the grade. Each grade’s instructional materials are coherent and consistent with the Standards.</p> <p>Earned: _____ of 14 points</p> <p><input type="checkbox"/> Meets expectations (12-14 points and no indicator receives a ‘0’)</p> <p><input type="checkbox"/> Partially meets expectations (8-11 points)</p> <p><input type="checkbox"/> Does not meet expectations (<8 points)</p> | <p>1a. Materials do not assess topics before the grade level indicated.</p> | <p>Point Totals from Rating Sheet(s):</p> | |
| | <p>1b. Students and teachers using the materials as designed devote the large majority¹⁵ of time in each grade K–8 to the major work of the grade.</p> | <p>Point Totals from Rating Sheet(s):</p> | |
| | <p>1c-1f. Each grade’s instructional materials are coherent and consistent with the Standards.</p> | <p>Point Totals from Rating Sheet(s):</p> | |

MATERIALS MUST MEET EXPECTATIONS FOR GATEWAY 1 TO MOVE ON TO GATEWAY 2.

¹³ For more on the major work of the grade, see [Focus by Grade Level](#).

¹⁴ The materials should devote at least 65% and up to approximately 85% of class time to the major work of the grade with Grades K–2 nearer the upper end of that range, i.e., 85%. However, 65%-85% should be viewed as a guideline for reviewers. Reviewers should use their judgment about materials on the borderline (e.g., 64%) and note specifics in the Justification/Comments area.

¹⁵ The materials should devote at least 65% and up to approximately 85% of class time to the major work of the grade with Grades K–2 nearer the upper end of that range, i.e., 85%. However, 65%-85% should be viewed as a guideline for reviewers. Reviewers should use their judgment about materials on the borderline (e.g., 64%) and note specifics in the Justification/Comments area.

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Gateway 2: Rigor and Mathematical Practices

- Does the instructional material meet the CCSS expectations for rigor and mathematical practices?

Rating Sheet 1: Rigor and balance within each grade

- For 'Rigor and balance within each grade' to attain a score of 'Meets Expectations,' material must earn at least 7 points.

| CRITERION | INDICATORS | RATING | EVIDENCE |
|---|--|------------------|----------|
| <p>Rigor and Balance: Each grade’s instructional materials 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.¹⁶</p> <p>Earned: ____ of 8 points</p> <p><input type="checkbox"/> Meets expectations (7-8 points)</p> <p><input type="checkbox"/> Partially meets expectations (5-6 points)</p> <p><input type="checkbox"/> Does not meet expectations (<5 points)</p> | <p>2a. Attention to Conceptual Understanding: Materials develop conceptual understanding of key mathematical concepts, especially where called for in specific content standards or cluster headings.</p> | <p>0 1 2</p> | |
| | <p>2b. Attention to Procedural Skill and Fluency: Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency.</p> | <p>0 1 2</p> | |
| | <p>2c. Attention to Applications: Materials are designed so that teachers and students spend sufficient time working with engaging applications of the mathematics, without losing focus on the major work of each grade.</p> | <p>0 1 2</p> | |
| | <p>2d. Balance: The three aspects of rigor are not always treated together and are not always treated separately. There is a balance of the 3 aspects of rigor within the grade.</p> | <p>0 1 2</p> | |

¹⁶ Refer also to Criterion #4 (page 10) in the Publisher’s Criteria.

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Rating Sheet 2: Connections between the Standards for Mathematical Practice and Standards for Mathematical Content

- For 'Connections between the Standards for Mathematical Practice and CCSSM' to attain a score of 'Meets Expectations,' Indicators must be greater than or equal to 9.

| CRITERION | INDICATORS | RATING | EVIDENCE |
|---|--|------------------|----------|
| <p>Practice-Content Connections: Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice.¹⁷</p> <p>Earned: _____ of 10 points</p> <p><input type="checkbox"/> Meets expectations (9-10 points)</p> <p><input type="checkbox"/> Partially meets expectations (6-8 points)</p> <p><input type="checkbox"/> Does not meet expectations (<6 points)</p> | <p>2e. The Standards for Mathematical Practice are identified and used to enrich mathematics content within and throughout each applicable grade.</p> | <p>0 1 2</p> | |
| | <p>2f. Materials carefully attend to the full meaning of each practice standard.¹⁸</p> | <p>0 1 2</p> | |
| | <p>2g. Emphasis on Mathematical Reasoning: Materials support the Standards' emphasis on mathematical reasoning by:¹⁹</p> | | |
| | <p>i. Materials prompt students to construct viable arguments and analyze the arguments of others concerning key grade-level mathematics detailed in the content standards.</p> | <p>0 1 2</p> | |
| | <p>ii. Materials assist teachers in engaging students in constructing viable arguments and analyzing the arguments of others concerning key grade-level mathematics detailed in the content standards.</p> | <p>0 1 2</p> | |
| <p>iii. Materials explicitly attend to the specialized language of mathematics.</p> | <p>0 1 2</p> | | |

¹⁷ Refer also to Criterion #7 (page 14) in the Publisher's Criteria. Not all items need to align to a Mathematical Practice. In addition, there is no requirement to have an equal balance among the Mathematical Practices in any set of materials or grade.

¹⁸ Refer also to Criterion #9 (page 15) in the Publisher's Criteria.

¹⁹ Refer also to Criterion #10 (page 15) in the Publisher's Criteria.

Overall Gateway 2 Rating: Rigor and Mathematical Practices

- Reviewers should use data recorded in Rating Sheet 1 to determine the Gateway 2 final rating.

| | CRITERIA | RATING SCORE | EVIDENCE |
|---|---|--|----------|
| <p>GATEWAY 2: RIGOR AND MATHEMATICAL PRACTICES: The materials align with CCSS expectations for rigor and mathematical practices.</p> <p>Earned: __ of 18 points</p> <p><input type="checkbox"/> Meets expectations (16-18 points)</p> <p><input type="checkbox"/> Partially meets expectations (11-15 points)</p> <p><input type="checkbox"/> Does not meet expectations (<11 points)</p> | <p>2a-2d. Each grade’s instructional materials 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.</p> | <p>Point Totals from Rating Sheet(s):</p> | |
| | <p>2e-2g. Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice.</p> | <p>Point Totals from Rating Sheet(s):</p> | |

MATERIALS MUST MEET EXPECTATIONS FOR GATEWAY 2 TO MOVE ON TO GATEWAY 3.

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Gateway 3: Instructional Supports and Usability Indicators

- Gateway 3 Rating Sheets include some Indicators that are rated and some that are not rated. In cases where Indicators are not rated, the evidence collected provides valuable information about instructional materials, although the indicator is not scored and does not affect the rating for the Criterion or Gateway.²⁰

Rating Sheet 1: Use and Design to Facilitate Student Learning

- For ‘Use and design facilitate student learning’ to attain a score of ‘Meets Expectations,’ material must earn at least 7 points.

| CRITERION | INDICATORS | RATING | EVIDENCE |
|---|--|------------------|----------|
| <p>Use and design facilitate student learning: Materials are well designed and take into account effective lesson structure and pacing.</p> <p>Earned: ____ of 8 points</p> <p><input type="checkbox"/> Meets expectations (7-8 points)</p> <p><input type="checkbox"/> Partially meets expectations (5-6 points)</p> <p><input type="checkbox"/> Does not meet expectations (<5 points)</p> | <p>3a. The underlying design of the materials distinguishes between problems and exercises. In essence, the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.</p> | <p>0 1 2</p> | |
| | <p>3b. Design of assignments is not haphazard: exercises are given in intentional sequences.</p> | <p>0 1 2</p> | |
| | <p>3c. There is variety in what students are asked to produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.</p> | <p>0 1 2</p> | |
| | <p>3d. Manipulatives are faithful representations of the mathematical objects they represent and when appropriate are connected to written methods.</p> | <p>0 1 2</p> | |
| | <p>3e. The visual design (whether in print or online) is not distracting or chaotic, but supports students in engaging thoughtfully with the subject.</p> | | |

²⁰ For indicators that do not currently receive a numerical rating, EdReports.org is providing evidence of the presence of these indicators but we are currently not including them in the ratings until we gather more information from reviewers and the field on their usefulness.

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Rating Sheet 2: Teacher Planning and Learning for Success with CCSS

- For Teacher Planning with the CCSS, Professional Learning, and Communication’ to attain a score of ‘Meets Expectations,’ material must earn at least 7 points.

| CRITERION | INDICATORS | RATING | EVIDENCE |
|---|--|------------------|----------|
| <p>Teacher Planning and Learning for Success with CCSS: Materials support teacher learning and understanding of the Standards.</p> <p>Earned: ____ of 8 points</p> <p><input type="checkbox"/></p> <p>Meets expectations (7-8 points)</p> <p><input type="checkbox"/></p> <p>Partially meets expectations (5-6 points)</p> <p><input type="checkbox"/></p> <p>Does not meet expectations (<5 points)</p> | <p>3f. Materials support teachers in planning and providing effective learning experiences by providing quality questions to help guide students’ mathematical development.</p> | <p>0 1 2</p> | |
| | <p>3g. Materials contain a teacher’s edition with ample and useful annotations and suggestions on how to present the content in the student edition and in the ancillary materials. Where applicable, materials include teacher guidance for the use of embedded technology to support and enhance student learning.</p> | <p>0 1 2</p> | |
| | <p>3h. Materials contain a teacher’s edition (in print or clearly distinguished/accessible as a teacher’s edition in digital materials) that contains full, adult-level explanations and examples of the more advanced mathematics concepts in the lessons so that teachers can improve their own knowledge of the subject, as necessary.</p> | <p>0 1 2</p> | |
| | <p>3i. Materials contain a teacher’s edition (in print or clearly distinguished/accessible as a teacher’s edition in digital materials) that explains the role of the specific grade-level mathematics in the context of the overall mathematics curriculum for kindergarten through grade twelve.</p> | <p>0 1 2</p> | |
| | <p>3j. Materials provide a list of lessons in the teacher’s edition (in print or clearly distinguished/accessible as a teacher’s edition in digital materials), cross-referencing the standards covered and providing an estimated instructional time for each lesson, chapter and unit (i.e., pacing guide).</p> | | |
| | <p>3k. Materials contain strategies for informing parents or caregivers about the mathematics program and suggestions for how they can help support student progress and achievement.</p> | | |
| | <p>3l. Materials contain explanations of the instructional approaches of the program and identification of the research-based strategies.</p> | | |

Rating Sheet 3: Assessment

- For 'Assessment' to attain a score of 'Meets Expectations,' material must earn at least 9 points.

| CRITERION | INDICATORS | RATING | EVIDENCE | |
|--|--|--------------|----------|--|
| <p>Assessment: Materials offer teachers resources and tools to collect ongoing data about student progress on the Standards.</p> <p>Earned: ____ of 10 points</p> <p><input type="checkbox"/> Meets expectations (9-10 points)</p> <p><input type="checkbox"/> Partially meets expectations (6-8 points)</p> <p><input type="checkbox"/> Does not meet expectations (<6 points)</p> | <p>3m. Materials provide strategies for gathering information about students' prior knowledge within and across grade levels.</p> | <p>0 1 2</p> | | |
| | <p>3n. Materials provide strategies for teachers to identify and address common student errors and misconceptions.</p> | <p>0 1 2</p> | | |
| | <p>3o. Materials provide opportunities for ongoing review and practice, with feedback, for students in learning both concepts and skills.</p> | <p>0 1 2</p> | | |
| | <p>3p. Materials offer ongoing formative and summative assessments:</p> | | | |
| | <p>i. Assessments clearly denote which standards are being emphasized.</p> | <p>0 1 2</p> | | |
| | <p>ii. Assessments include aligned rubrics and scoring guidelines that provide sufficient guidance to teachers for interpreting student performance and suggestions for follow-up.</p> | <p>0 1 2</p> | | |
| <p>3q. Materials encourage students to monitor their own progress.</p> | | | | |

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Rating Sheet 4: Differentiated Instruction

- For 'Differentiated Instruction' to attain a score of 'Meets Expectations,' material must earn at least 10 points.

| CRITERION | INDICATORS | RATING | EVIDENCE |
|---|--|------------------|----------|
| <p>Differentiated instruction: Materials support teachers in differentiating instruction for diverse learners within and across grades.</p> <p>Earned: ____ of 12 points</p> <p><input type="checkbox"/></p> <p>Meets expectations (10-12 points)</p> <p><input type="checkbox"/></p> <p>Partially meets expectations (8-9 points)</p> <p><input type="checkbox"/></p> <p>Does not meet expectations (<8 points)</p> | <p>3r. Materials provide strategies to help teachers sequence or scaffold lessons so that the content is accessible to all learners.</p> | <p>0 1 2</p> | |
| | <p>3s. Materials provide teachers with strategies for meeting the needs of a range of learners.</p> | <p>0 1 2</p> | |
| | <p>3t. Materials embed tasks with multiple entry-points that can be solved using a variety of solution strategies or representations.</p> | <p>0 1 2</p> | |
| | <p>3u. Materials suggest support, accommodations, and modifications for English Language Learners and other special populations that will support their regular and active participation in learning mathematics (e.g., modifying vocabulary words within word problems).</p> | <p>0 1 2</p> | |
| | <p>3v. Materials provide opportunities for advanced students to investigate mathematics content at greater depth.</p> | <p>0 1 2</p> | |
| | <p>3w. Materials provide a balanced portrayal of various demographic and personal characteristics.</p> | <p>0 1 2</p> | |
| | <p>3x. Materials provide opportunities for teachers to use a variety of grouping strategies.</p> | | |
| <p>3y. Materials encourage teachers to draw upon home language and culture to facilitate learning.</p> | | | |

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Rating Sheet 5: Effective Technology Use

- For ‘Effective Technology Use,’ indicators are not rated but evidence should be collected if included in review materials. EdReports.org considers technology use to be an important element of usability, but since printed and online materials vary widely in their use of technology, we are not scoring these indicators at this time.

| CRITERION | INDICATORS | RATING | EVIDENCE |
|--|--|--------|----------|
| <p>Effective technology use: Materials support effective use of technology to enhance student learning. Digital materials are accessible and available in multiple platforms.</p> | <p>3z. Materials integrate technology such as interactive tools, virtual manipulatives/objects, and/or dynamic mathematics software in ways that engage students in the Mathematical Practices.</p> | | |
| | <p>3aa. Digital materials (either included as part of the core materials or as part of a digital curriculum) are web-based and compatible with multiple internet browsers (e.g., Internet Explorer, Firefox, Google Chrome, etc.). In addition, materials are “platform neutral” (i.e., are compatible with multiple operating systems such as Windows and Apple and are not proprietary to any single platform) and allow the use of tablets and mobile devices.</p> | | |
| | <p>3ab. Materials include opportunities to assess student mathematical understandings and knowledge of procedural skills using technology.</p> | | |
| | <p>3ac. Materials can be easily customized for individual learners.</p> | | |
| | <p>i. Digital materials include opportunities for teachers to personalize learning for all students, using adaptive or other technological innovations.</p> | | |
| | <p>ii. Materials can be easily customized for local use. For example, materials may provide a range of lessons to draw from on a topic.</p> | | |
| | <p>3ad. Materials include or reference technology that provides opportunities for teachers and/or students to collaborate with each other (e.g. websites, discussion groups, webinars, etc.).</p> | | |

Overall Gateway 3 Rating: Instructional Supports and Usability Indicators

- Reviewers should use data recorded in Rating Sheets 1 thru 4 to determine the Gateway 3 final rating.

| | CRITERIA | RATING | EVIDENCE |
|---|--|--|----------|
| <p>GATEWAY 3: Instructional Supports and Usability Indicators: Materials support student learning and engagement and support teacher learning and understanding of the Standards. Materials also offer supports to differentiate instruction for diverse learners and enrich instruction through technology.</p> <p>Earned: _____ of 38 points</p> <p><input type="checkbox"/> Meets expectations (31-38 points)</p> <p><input type="checkbox"/> Partially meets expectations (23-30 points)</p> <p><input type="checkbox"/> Does not meet expectations (<22 points)</p> | <p>3a-3e. Materials are well designed and take into account effective lesson structure and pacing to facilitate student learning.</p> | <p>Point Totals from Rating Sheet(s):</p> | |
| | <p>3f-3l. Materials support teacher learning and understanding of the Standards.</p> | <p>Point Totals from Rating Sheet(s):</p> | |
| | <p>3m-3q. Materials offer teachers resources and tools to collect ongoing data about student progress on the Standards.</p> | <p>Point Totals from Rating Sheet(s):</p> | |
| | <p>3r-3y. Materials support teachers in differentiating instruction for diverse learners within and across grades.</p> | <p>Point Totals from Rating Sheet(s):</p> | |
| | <p>3z-3ad. Materials support effective use of technology to enhance student learning.</p> | <p>Not rated</p> | |