Instructional Materials Evaluation - Student Standards Review

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

Title: **Mathematics** Grade: **6-8**

Publisher: **Eureka Math** Copyright: **2013**

Overall Rating: **Tier I, exemplifies quality**

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

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

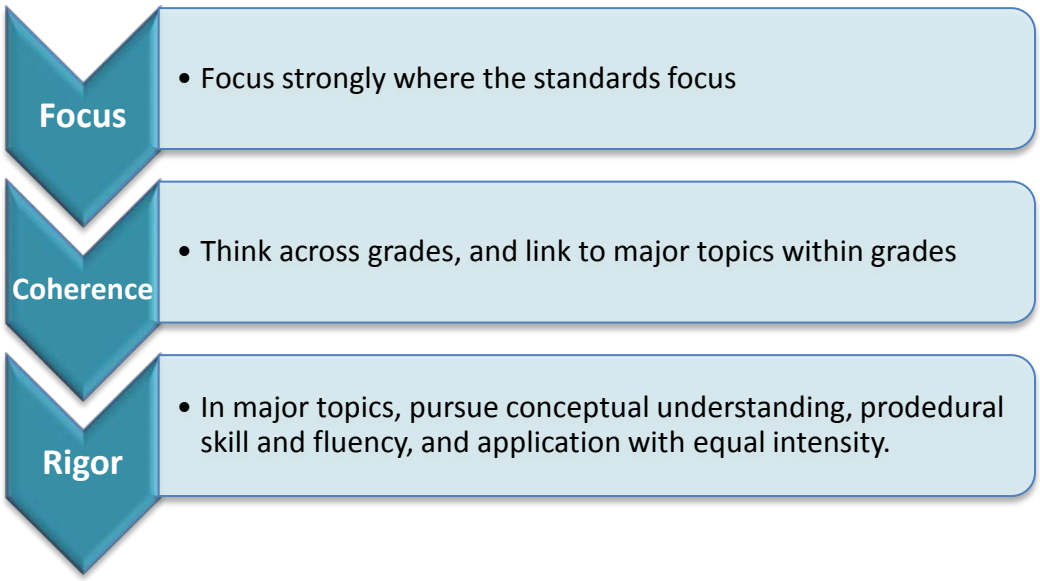
The following two indicators may be impacted:

- Focus on Major Work (Non-Negotiable)
- Consistent, Coherent Content (Non-Negotiable)

This review remains a Tier 1 rating. As a result of these changes, the following chart identifies the potential impact on specific elements in the current review. The LDOE recommends that district curriculum staff, principals, and teachers take these findings into consideration when using these instructional materials.

Criteria	Currently in the Rubric	Next Steps for Educators
Focus on Major Work (Non-Negotiable)	This program currently is reviewed as "Yes" for these criteria because the materials devote the majority of class time to the major work of the grade. Materials provide assessments throughout each module.	Make sure to review all assessment materials to ensure alignment to new clarifications/limitations and the revised, as well as, the placement of standards by grade/course.
Consistent, Coherent Content (Non-Negotiable)	This program currently is reviewed as "Yes" for these criteria because the materials were consistently found to connect the major content to the support content in meaningful ways at all grade levels. It is evident that there is scaffolding between or among the standards clusters which provides the focus and coherence throughout the year.	Make sure to review instructional materials focused on new supporting content (e.g., money in Grades K and 1) to ensure it supports the major work of the grade/course.

Strong mathematics instruction contains the following elements:



Title: **Mathematics** **Grade:** **6 – 8**

Publisher: **Eureka Math** **Copyright:** **2013**

Overall Rating: **Tier I, Exemplifies quality**

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

STRONG	WEAK
Focus on Major Work (Non-Negotiable)	
Consistent, Coherent Content (Non-Negotiable)	
Rigor and Balance (Non-Negotiable)	
Practice-Content Connections (Non-Negotiable)	
Alignment Criteria for Standards for Mathematical Content	
Alignment Criteria for Standards for Mathematical Practice	
Indicators of Quality	

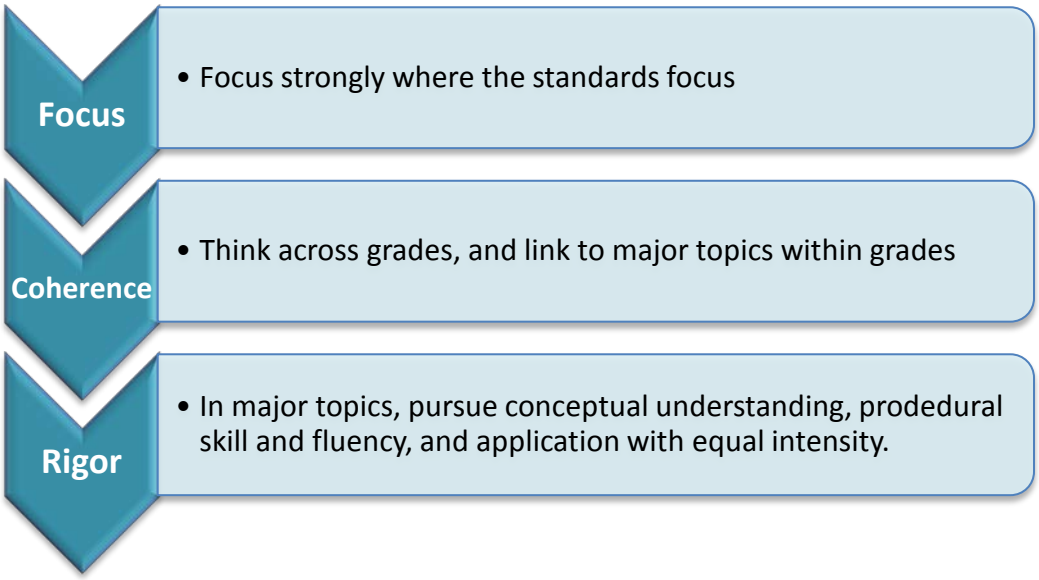
Each set of submitted materials was evaluated for alignment with the standards beginning with a review of the indicators for the non-negotiable criteria. If those criteria were met, a review of the other criteria ensued.

Tier 1 ratings received a "Yes" for all Criteria 1 – 7.
Tier 2 ratings received a "Yes" for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" for the remaining criteria.
Tier 3 ratings received a "No" for at least one of the non-negotiable criteria.

Click below for complete grade-level reviews:

Grade 6 (Tier 1)
Grade 7 (Tier 1)
Grade 8 (Tier 1)

Strong mathematics instruction contains the following elements:



Title: Mathematics **Grade:** 6

Publisher: Eureka Math **Copyright:** 2013

Overall Rating: Tier I, Exemplifies quality

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

STRONG	WEAK
Focus on Major Work (Non-Negotiable)	
Consistent, Coherent Content (Non-Negotiable)	
Rigor and Balance (Non-Negotiable)	
Practice-Content Connections (Non-Negotiable)	
Alignment Criteria for Standards for Mathematical Content	
Alignment Criteria for Standards for Mathematical Practice	
Indicators of Quality	

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.

For Section II, begin by reviewing the required indicators in Column 2 for each criterion. If there is a "Yes" for all required indicators in Column 2, then the materials receive a "Yes" in Column 1. If there is a "No" for any required indicators in Column 2, then the materials receive a "No" in Column 1.

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria to move to tier 2.			
Non-Negotiable 1. FOCUS ON MAJOR WORK[1]: Students and teachers using the materials as designed devote the large majority[2] of time in each grade K–8 to the major work of the grade. ■ Yes ☐ No	**REQUIRED** **1a)** Materials should devote at least 65% and up to approximately 85% of class time to the major work of each grade with Grades K–2 nearer the upper end of that range, i.e., 85%. Each grade must meet the criterion; do not average across two or more grades.	**Yes**	Materials for grade 6 devote at least 70% of class time to the major work for this grade. Standards are taught in isolation in each module for grade 6.
	REQUIRED **1b)** In any one grade, aligned materials should spend minimal time on content outside of the appropriate grade levels. In aligned materials there are no chapter tests, unit tests, or other such assessment components that make students or teachers responsible for any topics before the grade in which they are introduced in the Standards.[3]	**Yes**	Aligned materials focus only on standards for grade 6.
Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course's instructional materials are coherent and consistent with the content in the standards. ■ Yes ☐ No	**REQUIRED** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.[4]	**Yes**	Materials connect supporting content and major content within each module with standards taught in isolation within each module.
	REQUIRED **2b)** Materials including 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.[5]	**Yes**	Materials include problems and activities that connect two or more clusters in a natural way.

[1] For more on the major work of the grade, see Focus by Grade Level.
[2] 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%.
[3] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[4] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[5] Refer also to criterion #6 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 I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 3. 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.[6] ☐ Yes ☐ No	**REQUIRED** **3a)** ***Attention to Conceptual Understanding:*** Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts throughout each module while exposing students to real life situations (e.g., see 6.2 topic A, 6.1 topic C).
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials help students make steady progress throughout the year toward fluent computation. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	Materials give attention to individual standards that set an expectation of procedural skill and fluency that allow sufficient practice of the skill being addressed.
	REQUIRED **3c)** ***Attention to Applications:*** Materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the major work of each grade including ample practice with single-step and multi-step contextual problems that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving.	**Yes**	Materials are designed to allow sufficient time to work on major standards with single-step and multi-step problems. Examples shown throughout examples within in the module.
	REQUIRED **3d)** ***Balance:*** The three aspects of rigor are not always treated together, and are not always treated separately.	**Yes**	The three aspects of rigor are balanced depending on the concepts and skills being taught.
Non-Negotiable 4. PRACTICE-CONTENT CONNECTIONS: Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice.[7, 8] ☐ Yes ☐ No	**REQUIRED** **4a)** The materials connect the Standards for Mathematical Practice and the Standards for Mathematical Content.	**Yes**	Mathematical practices are mentioned and discussed in depth within each module for grade 6 (e.g., see pg. 6 of Module 6.3)
	REQUIRED **4b)** The developer provides a description or analysis, aimed at evaluators, which shows how materials meaningfully connect the Standards for Mathematical Practice to the Standards for Mathematical Content within each applicable grade.	**Yes**	Mathematical practices are mentioned and discussed in depth within each module following standards being addressed in the given module.

[6] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[7] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[8] All items do not 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.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion 5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: Materials foster focus and coherence by linking topics within grades (across domains and clusters) and across grades by staying consistent with the progressions in the standards. ■ Yes ☐ No	**REQUIRED** **5a)** Materials base content progressions on the grade-by-grade progressions in the Standards. [9]	**Yes**	Progression is evident within each module through activities and examples.
	REQUIRED **5b)** Materials provide all students extensive work with course-level problems. Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.[10]	**Yes**	Materials provided allow students extensive work with grade level appropriate problems.
	REQUIRED **5c)** Materials relate course-level concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.[10]	**Yes**	Materials within each module address prior knowledge from previous grades and modules in grade 6.
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[10]	**Yes**	Learning objectives are mentioned at the start of each module following standards and mathematical practices.
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. [11]	**Yes**	Materials preserve the focus, coherence, and rigor of the standards in each module.

[9] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[10] Refer also to criterion #6 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 (continued): ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the standards rather than detract from the focus and include additional content/skills to teach which are not included in the standards. ■ Yes ☐ No	**REQUIRED** **6a)** Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.[11] The analysis for evaluators explains how the full meaning of each practice standard has been attended to in the materials.	**Yes**	This is analyzed in depth in the overview of each module.
	REQUIRED **6b)** Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of other concerning key grade-level mathematics that is detailed in the content standards (cf. MP.3).[12]	**Yes**	Students are provided opportunities to construct viable arguments to their answers. MP.3 is not addressed with the rest of the mathematical practices in each module.
	REQUIRED **6c)** Materials engage students in problem solving as a form of argument, attending thoroughly to places in the standards that explicitly set expectations for multi-step problems.[12]	**Yes**	Materials engage students in multi-step problems.
	6d) Materials explicitly attend to the specialized language of mathematics.[12]	**Yes**	Materials explicitly attend to the language of mathematics.

[11] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[12] Refer also to criterion #10 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

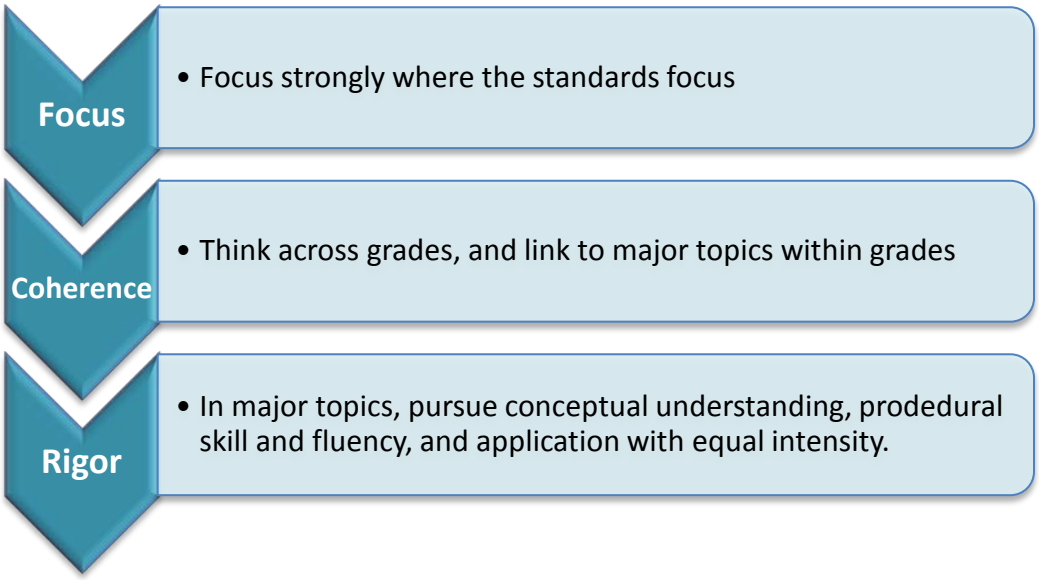
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION II (continued): ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion 7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards. ☐ Yes ☐ No	**REQUIRED** **7a)** 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.	**Yes**	There is distinction between problems and exercise in each module.
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Yes**	Exercises are given in intentional sequences and are scaffolded throughout and between modules.
	REQUIRED **7c)** There is variety in what students 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.	**Yes**	Student products are varied, but most of the products are paper and pencil problem solving.
	REQUIRED **7d)** There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Yes**	The separate teacher materials support and reward teacher study using concise and direct guidance within the module overviews.
	REQUIRED **7e)** Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. The language in which problems are posed is carefully considered.	**Yes**	Scaffolding is present for different levels of learners but support for English Language Learners and other special populations is not readily evident in examples of work and activities.
	7f) There is variety in the pacing and grain size of content coverage.[13]	**Yes**	There is variety in pacing within each module.
	7g) Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Yes**	The materials are structured to support teachers through learning paths and active student participation.
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Yes**	Manipulatives are representative and connected to written methods.

[13] Refer also to page 18 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

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. Focus on Major Work	**Yes**	Materials for grade 6 devote at least 70% of class time to the major work for this grade. Standards are taught in isolation in each module for grade 6.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content and major content within each module but standards seem to be taught in isolation within each module.
	3. Rigor and Balance	**Yes**	Materials develop conceptual understanding of key mathematical concepts throughout each module while exposing students to real life situations. Materials also give attention to individual standards that set an expectation of procedural skill and fluency that allow sufficient practice of the skill being addressed.
	4. Practice-Content Connections	**Yes**	Mathematical practices are mentioned and discussed in depth within each module following standards being addressed in the given module.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Progression is evident within each module through activities and examples. Learning objectives are also mentioned at the start of each module following standards and mathematical practices.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	Students are provided opportunities to construct viable arguments to their answers. MP.3 is not addressed with the rest of the mathematical practices in each module.
	7. Indicators of Quality	**Yes**	Quality materials are outlined and provided for both teacher and students within each module. Scaffolding is present for different levels of learners, but support for English Language Learners is not explicitly evident in examples of work and activities.
FINAL DECISION FOR THIS MATERIAL: <u>Tier I, Exemplifies quality</u>			

Strong mathematics instruction contains the following elements:



Title: Mathematics **Grade:** 7

Publisher: Eureka Math **Copyright:** 2013

Overall Rating: Tier I, Exemplifies quality

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

STRONG	WEAK
Focus on Major Work (Non-Negotiable)	
Consistent, Coherent Content (Non-Negotiable)	
Rigor and Balance (Non-Negotiable)	
Practice-Content Connections (Non-Negotiable)	
Alignment Criteria for Standards for Mathematical Content	
Alignment Criteria for Standards for Mathematical Practice	
Indicators of Quality	

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.

For Section II, begin by reviewing the required indicators in Column 2 for each criterion. If there is a "Yes" for all required indicators in Column 2, then the materials receive a "Yes" in Column 1. If there is a "No" for any required indicators in Column 2, then the materials receive a "No" in Column 1.

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria to move to tier 2.			
Non-Negotiable 1. FOCUS ON MAJOR WORK[1]: Students and teachers using the materials as designed devote the large majority[2] of time in each grade K–8 to the major work of the grade. ■ Yes ☐ No	**REQUIRED** **1a)** Materials should devote at least 65% and up to approximately 85% of class time to the major work of each grade with Grades K–2 nearer the upper end of that range, i.e., 85%. Each grade must meet the criterion; do not average across two or more grades.	**Yes**	Materials for grade 7 devote at least 70% of class time to the major work for this grade. Standards are taught in isolation in each module for grade 7.
	REQUIRED **1b)** In any one grade, aligned materials should spend minimal time on content outside of the appropriate grade levels. In aligned materials there are no chapter tests, unit tests, or other such assessment components that make students or teachers responsible for any topics before the grade in which they are introduced in the Standards.[3]	**Yes**	Aligned materials focus only on standards for grade 7. Materials provide assessments throughout each module with no chapter or unit tests.
Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course's instructional materials are coherent and consistent with the content in the standards. ■ Yes ☐ No	**REQUIRED** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.[4]	**Yes**	Materials provide coherence throughout each module for grade 7 with an overlap of some standards in modules 7.2 and 7.3 (EE.A.2) and modules 7.3 and 7.6 for standard G.B.6.
	REQUIRED **2b)** Materials including 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.[5]	**Yes**	Materials include problems and activities that connect tw or more clusters in a natural way.

[1] For more on the major work of the grade, see Focus by Grade Level.
[2] 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%.
[3] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[4] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[5] Refer also to criterion #6 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 I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 3. 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.[6] ■ Yes ☐ No	**REQUIRED** **3a)** ***Attention to Conceptual Understanding:*** Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts throughout each module while exposing students to real life situations (e.g., Module 7.2, topic A, standard NS.A.1d provides real life application).
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials help students make steady progress throughout the year toward fluent computation. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	Materials give attention to individual standards that set an expectation of procedural skill and fluency that allow sufficient practice of the skill being addressed. Module 7.2 addresses fluency on 6.NS.B.3.
	REQUIRED **3c)** ***Attention to Applications:*** Materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the major work of each grade including ample practice with single-step and multi-step contextual problems that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving.	**Yes**	Materials are designed to allow sufficient time to work on major standards with single-step and multi-step problems. Examples shown throughout examples within in the module.
	REQUIRED **3d)** ***Balance:*** The three aspects of rigor are not always treated together, and are not always treated separately.	**Yes**	The three aspects of rigor are balanced depending on the concepts and skills being taught.
Non-Negotiable 4. PRACTICE-CONTENT CONNECTIONS: Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice.[7, 8] ■ Yes ☐ No	**REQUIRED** **4a)** The materials connect the Standards for Mathematical Practice and the Standards for Mathematical Content.	**Yes**	Mathematical practices are mentioned and discussed in depth within each module for grade 7.
	REQUIRED **4b)** The developer provides a description or analysis, aimed at evaluators, which shows how materials meaningfully connect the Standards for Mathematical Practice to the Standards for Mathematical Content within each applicable grade.	**Yes**	Mathematical practices are mentioned and discussed in depth within each module following standards being addressed in the given module.

[6] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[7] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[8] All items do not 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.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion 5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: Materials foster focus and coherence by linking topics within grades (across domains and clusters) and across grades by staying consistent with the progressions in the standards. ■ Yes ☐ No	**REQUIRED** **5a)** Materials base content progressions on the grade-by-grade progressions in the Standards. [9]	**Yes**	Progression is evident within each module through activities and examples.
	REQUIRED **5b)** Materials provide all students extensive work with course-level problems. Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.[10]	**Yes**	Materials provided allow students extensive work with grade level appropriate problems.
	REQUIRED **5c)** Materials relate course-level concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.[10]	**Yes**	Materials within each module address prior knowledge from previous grades and modules in grade 7.
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[10]	**Yes**	Learning objectives are mentioned at the start of each module following standards and mathematical practices.
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. [11]	**Yes**	Materials preserve the focus, coherence, and rigor of the standards in each module.

[9] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[10] Refer also to criterion #6 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 (continued): ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the standards rather than detract from the focus and include additional content/skills to teach which are not included in the standards. ■ Yes ☐ No	**REQUIRED** **6a)** Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.[11] The analysis for evaluators explains how the full meaning of each practice standard has been attended to in the materials.	**Yes**	This is analyzed in depth in the overview of each module.
	REQUIRED **6b)** Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of other concerning key grade-level mathematics that is detailed in the content standards (cf. MP.3).[12]	**Yes**	Students are provided opportunities to construct viable arguments to their answers. MP.3 is discussed in modules 7.5 and 7.6 but is not discussed in the other modules. Each module has at least two mathematical practices that are discussed at the beginning of each module and all modules address all mathematical practices through problems and activities.
	REQUIRED **6c)** Materials engage students in problem solving as a form of argument, attending thoroughly to places in the standards that explicitly set expectations for multi-step problems.[12]	**Yes**	Materials engage students in multi-step problems.
	6d) Materials explicitly attend to the specialized language of mathematics.[12]	**Yes**	Materials explicitly attend to the language of mathematics.

[11] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[12] Refer also to criterion #10 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

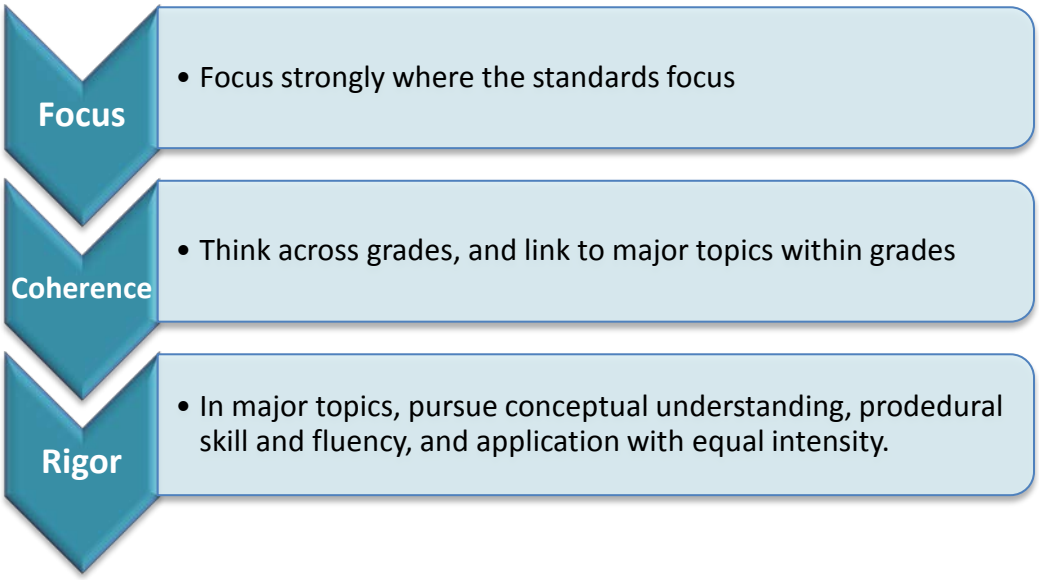
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION II (continued): ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion 7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards.	**REQUIRED** **7a)** 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.	**Yes**	There is distinction between problems and exercise in each module.
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Yes**	Exercises are given in intentional sequences and are scaffolded throughout and between modules.
■ Yes ☐ No	**REQUIRED** **7c)** There is variety in what students 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.	**Yes**	There is a variety in students responses ranging from solutions, number lines, and mathematical models.
	REQUIRED **7d)** There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Yes**	The separate teacher materials support and reward teacher study using concise and direct guidance within the module overviews.
	REQUIRED **7e)** Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. The language in which problems are posed is carefully considered.	**Yes**	Scaffolding is present for different levels of learners, but support for English Language Learners and other special populations is not readily evident in examples of work and activities.
	7f) There is variety in the pacing and grain size of content coverage.[13]	**Yes**	There is variety in pacing within each module.
	7g) Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Yes**	Each lesson is carefully structured to include scaffolding and variation in instruction.
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Yes**	Manipulatives are representative and connected to written methods.

[13] Refer also to page 18 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

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. Focus on Major Work	**Yes**	Materials for grade 7 devote at least 70% of class time to the major work for this grade. Standards are taught in isolation in each module for grade 6.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting and major content within each module but standards are taught in isolation within each module.
	3. Rigor and Balance	**Yes**	Materials develop conceptual understanding of key mathematical concepts throughout each module while exposing students to real life situations. Materials give attention to individual standards that set an expectation of procedural skill and fluency allowing sufficient practice of the skill.
	4. Practice-Content Connections	**Yes**	Mathematical practices are mentioned and discussed in depth within each module following standards being addressed in the given module.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Progression is evident within each module through activities and examples. Learning objectives are also mentioned at the start of each module following standards and mathematical practices.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	Students are provided opportunities to construct viable arguments to their answers (e.g., MP.3 is discussed in modules 7.5 and 7.6 and is present throughout all modules in student work).
	7. Indicators of Quality	**Yes**	Quality materials are outlined and provided for both teacher and students within each module. Scaffolding is present for different levels of learners, but support for English Language Learners is not explicitly evident in examples of work and activities.
FINAL DECISION FOR THIS MATERIAL: Tier I, Exemplifies quality			

Strong mathematics instruction contains the following elements:



Title: **Mathematics** **Grade:** **8**

Publisher: **Eureka Math Publisher** **Copyright:** **2013**

Overall Rating: **Tier I, Exemplifies quality**

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

STRONG	WEAK
Focus on Major Work (Non-Negotiable)	
Consistent, Coherent Content (Non-Negotiable)	
Rigor and Balance (Non-Negotiable)	
Practice-Content Connections (Non-Negotiable)	
Alignment Criteria for Standards for Mathematical Content	
Alignment Criteria for Standards for Mathematical Practice	
Indicators of Quality	

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.

For Section II, begin by reviewing the required indicators in Column 2 for each criterion. If there is a "Yes" for all required indicators in Column 2, then the materials receive a "Yes" in Column 1. If there is a "No" for any required indicators in Column 2, then the materials receive a "No" in Column 1.

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1-7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria to move to tier 2.			
Non-Negotiable 1. FOCUS ON MAJOR WORK[1]: Students and teachers using the materials as designed devote the large majority[2] of time in each grade K–8 to the major work of the grade. ■ Yes ☐ No	**REQUIRED** **1a)** Materials should devote at least 65% and up to approximately 85% of class time to the major work of each grade with Grades K–2 nearer the upper end of that range, i.e., 85%. Each grade must meet the criterion; do not average across two or more grades.	**Yes**	Materials devote approximately 79% of class time to the major work of eighth grade.
	REQUIRED **1b)** In any one grade, aligned materials should spend minimal time on content outside of the appropriate grade levels. In aligned materials there are no chapter tests, unit tests, or other such assessment components that make students or teachers responsible for any topics before the grade in which they are introduced in the Standards.[3]	**Yes**	Materials focus on content within eighth grade.
Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course's instructional materials are coherent and consistent with the content in the standards. ■ Yes ☐ No	**REQUIRED** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.[4]	**Yes**	All but two of the standards clusters are taught in isolation, however it is evident that there is scaffolding between or among the standards clusters which provides the focus and coherence throughout the year.
	REQUIRED **2b)** Materials including 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.[5]	**Yes**	All but two of the standards clusters are taught in isolation, but they are connected through scaffolding throughout the modules and between modules.

[1] For more on the major work of the grade, see Focus by Grade Level.
[2] 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%.
[3] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[4] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[5] Refer also to criterion #6 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 I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 3. 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.[6] ■ Yes ☐ No	**REQUIRED** **3a)** ***Attention to Conceptual Understanding:*** Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and questions.	**Yes**	Lessons guide teachers and students to develop a conceptual understanding of the mathematical concept being taught.
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials help students make steady progress throughout the year toward fluent computation. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	Lessons provide fluency practice within the classwork section of the lesson to help students with the concept being taught.
	REQUIRED **3c)** ***Attention to Applications:*** Materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the major work of each grade including ample practice with single-step and multi-step contextual problems that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving.	**Yes**	Exercises in lessons provide students with application opportunities.
	REQUIRED **3d)** ***Balance:*** The three aspects of rigor are not always treated together, and are not always treated separately.	**Yes**	The three aspects of rigor are balanced depending on the concepts and skills being taught.
Non-Negotiable 4. PRACTICE-CONTENT CONNECTIONS: Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice.[7, 8] ■ Yes ☐ No	**REQUIRED** **4a)** The materials connect the Standards for Mathematical Practice and the Standards for Mathematical Content.	**Yes**	Every lesson provides evidence of a connection between the Standards for Mathematical Practice and the Standards for Mathematical Content.
	REQUIRED **4b)** The developer provides a description or analysis, aimed at evaluators, which shows how materials meaningfully connect the Standards for Mathematical Practice to the Standards for Mathematical Content within each applicable grade.	**Yes**	Overview of each module provides the meaningful connections.

[6] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[7] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[8] All items do not 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.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion 5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: Materials foster focus and coherence by linking topics within grades (across domains and clusters) and across grades by staying consistent with the progressions in the standards. ■ Yes ☐ No	**REQUIRED** **5a)** Materials base content progressions on the grade-by-grade progressions in the Standards. [9]	**Yes**	The overview of each module provides the content progressions that are included in that module.
	REQUIRED **5b)** Materials provide all students extensive work with course-level problems. Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.[10]	**Yes**	Students are provided with extensive work with course-level problems that require them to use knowledge from previous grades.
	REQUIRED **5c)** Materials relate course-level concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.[10]	**Yes**	Concepts scaffold on prior knowledge from previous grades.
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[10]	**Yes**	Learning objectives are mentioned at the start of each module following standards and mathematical practices.
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. [11]	**Yes**	Materials preserve the focus, coherence, and rigor of the standards in each module.

[9] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[10] Refer also to criterion #6 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 (continued): ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the standards rather than detract from the focus and include additional content/skills to teach which are not included in the standards. ■ Yes ☐ No	**REQUIRED** **6a)** Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.[11] The analysis for evaluators explains how the full meaning of each practice standard has been attended to in the materials.	**Yes**	This is analyzed in depth in the overview of each module.
	REQUIRED **6b)** Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of other concerning key grade-level mathematics that is detailed in the content standards (cf. MP.3).[12]	**Yes**	This is not explicitly explained, but it is very evident that students have sufficient opportunities through the use of defending their strategies and explain their work.
	REQUIRED **6c)** Materials engage students in problem solving as a form of argument, attending thoroughly to places in the standards that explicitly set expectations for multi-step problems.[12]	**Yes**	Most lessons provide student engagement in problem solving through multi-step problems and opportunity for students to defend their work.
	6d) Materials explicitly attend to the specialized language of mathematics.[12]	**Yes**	Materials explicitly attend to the language of mathematics.

[11] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[12] Refer also to criterion #10 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 (continued): ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion 7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards. ☐ Yes ☐ No	**REQUIRED** **7a)** 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.	**Yes**	There is a definite difference between the problems and exercises, and they are labeled as such.
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Yes**	Exercises are given in intentional sequences and are scaffolded throughout and between modules.
	REQUIRED **7c)** There is variety in what students 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.	**Yes**	Student products are varied, but most of the products are paper and pencil problem solving.
	REQUIRED **7d)** There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Yes**	The separate teacher materials support and reward teacher study using concise and direct guidance within the module overviews.
	REQUIRED **7e)** Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. The language in which problems are posed is carefully considered.	**Yes**	There is support for special populations, but evidence for English Language Learners is not readily apparent.
	7f) There is variety in the pacing and grain size of content coverage.[13]	**Yes**	There is variety in the pacing and grain size of content.
	7g) Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.	**Yes**	The materials are structured to support teachers through learning paths and active student participation.
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Yes**	Manipulatives are representative and connected to written methods.

[13] Refer also to page 18 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1-7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

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. Focus on Major Work	**Yes**	The materials meet the 65%-85% range and do focus on the major work.
	2. Consistent, Coherent Content	**Yes**	The instructional materials are coherent and consistent with the content in the standards for eighth grade.
	3. Rigor and Balance	**Yes**	The components of conceptual understanding and fluency are clearly evident.
	4. Practice-Content Connections	**Yes**	The Standards for Mathematical Practice are contained within the lessons of the materials, and are clearly addressed within lesson activities.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Materials foster focus and coherence by linking topics within eighth grade (across domains and clusters) and to previous and future grades by staying consistent with the progressions in the standards.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	The Standards for Mathematical Practice are clearly addressed and connected in activities in each lesson where appropriate.
	7. Indicators of Quality	**Yes**	While there is no explicit evidence of support for English Language Learners, there is support for special populations. The connections between manipulatives and written methods are also strong.
FINAL DECISION FOR THIS MATERIAL: <u>Tier I, Exemplifies quality</u>			