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: **HMH GO Math** Grade: **K-6**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

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

The following two indicators may be impacted:

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

This review remains a Tier 3 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.

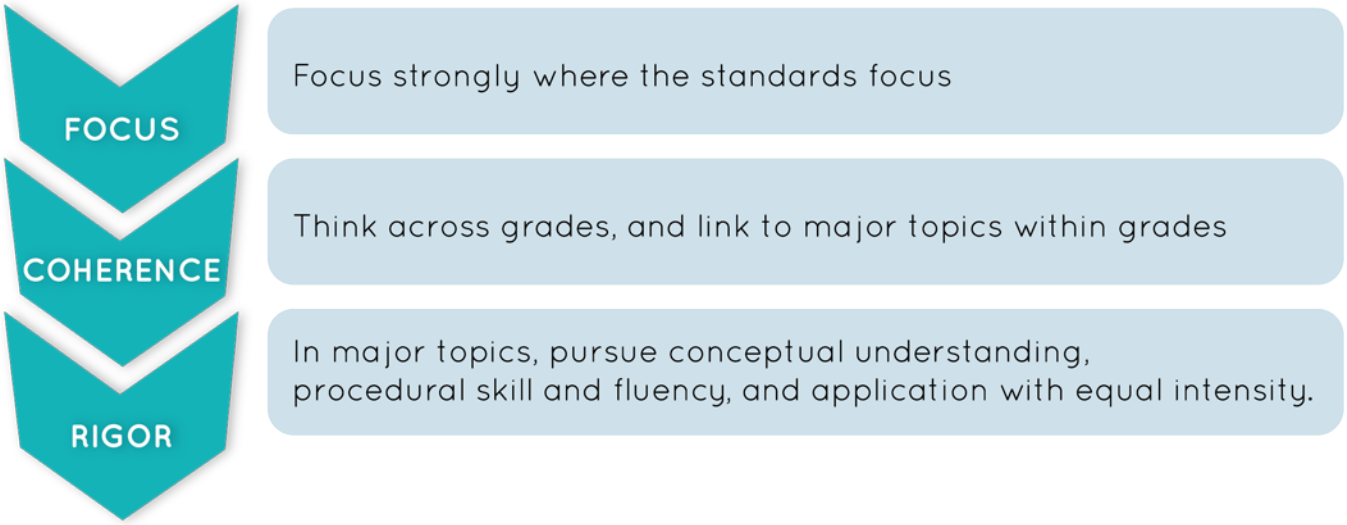
Criteria	Currently in the Rubric	Next Steps for Educators
Focus on Major Work (Non-Negotiable)	This program currently is reviewed as "No" for this criterion because the materials do not devote the majority of class time to the major work of the grade and grade-level clusters. Grade 5 materials missed this indicator because work in other grades is present on assessments.	Since these materials received a "No" for this indicator, the current weakness will likely remain and should be addressed by adjusting or supplementing with stronger programs.
Consistent, Coherent Content (Non-Negotiable)	This program currently is reviewed as "Yes" for this criterion in Grades K-2 and 4-6 because the materials were consistently found to connect supporting content to major content in meaningful ways so focus and coherence are enhanced throughout the year. This program currently is reviewed as "No" for this criterion in Grade 3 because supporting work of the materials does not support the major work of the grade.	Make sure to review instructional materials focused on new supporting content (e.g., money in Grades K, 1, and 3) to ensure it supports the major work of the grade/course. Since these materials received a "No" for this indicator, the current weakness will likely remain and should be addressed by adjusting or supplementing with stronger programs.

DEPARTMENT of EDUCATION
Louisiana Believes

Instructional Materials Evaluation Tool for Alignment in Mathematics Grades K – 8 (IMET)

FULL CURRICULUM
Instructional Materials

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **K-6**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
2. Consistent, Coherent Content (Non-Negotiable) *	1. Focus on Major Work (Non-Negotiable)
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	
* *Weak at Grade 3*	

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

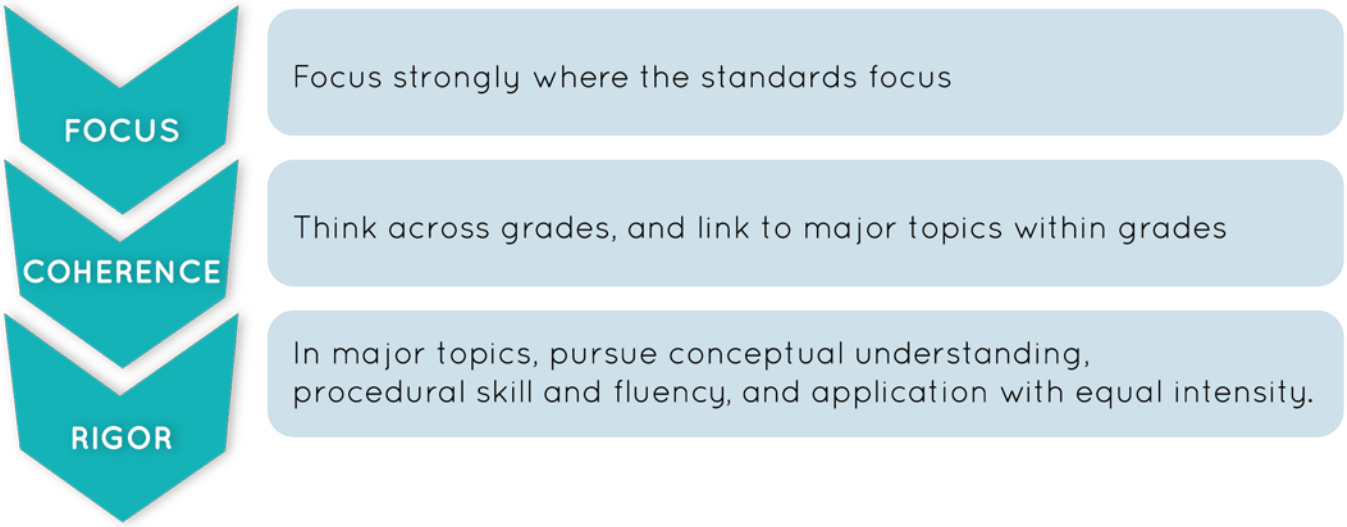
Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

Click below for complete grade-level reviews:

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

Grade 4 (Tier 3) Grade 5 (Tier 3) Grade 6 (Tier 3)

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **K**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
2. Consistent, Coherent Content (Non-Negotiable)	1. Focus on Major Work (Non-Negotiable)
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
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 the large majority of class time to the major work of each grade. Each grade must meet the criterion; do not average across two or more grades.	**No**	Materials do not devote the large majority of class time to the major work of the grade. Students spend a disproportionate amount of time on supporting and additional clusters. The book contains 12 Chapters with 100 Lessons total. Eight Chapters (68 Lessons) are devoted to the major work of Kindergarten while the other four Chapters (32 Lessons) are devoted to supporting and/or additional clusters. Only 68% of the Lessons focus on the major work of Kindergarten when this percentage should be closer to 85%.
	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**	Minimal time is spent on content outside of Kindergarten, and no assessment items hold students responsible for content above that of Kindergarten.
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 to major content in meaningful ways. Many of the clusters are presented in isolation within a chapter. However, an effort is made to connect the content when appropriate (e.g., In Lessons 12.1, 12.2, 12.3 and 12.4 students sort objects into categories and count (K.MD.B.3). After sorting the objects students are asked to count them and write the number which is also addressed in standards (K.CC.A.1, K.CC.A.3, K.CC.B.4).

[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).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	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 serve to connect two or more clusters in a domain (e.g., Chapter 3 makes connections between K.CC.B5 and K.CC.A.3). The lesson on Model and Draw Addition Problems requires students to count the number of items and put together the number of individual objects. This connects the two major clusters of count to tell the number of objects and understand addition as putting together and adding to.
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 conceptual discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts using a variety of manipulatives (e.g., when students are asked to make 10, blocks are used to show the connection) (K.OA.A.3). The materials develop conceptual understanding of key mathematical concepts and amply feature high-quality conceptual problems and conceptual discussion questions. Throughout the text, there is an emphasis placed on modeling (e.g., see in Chapter 3 that there are multiple hands-on lessons where students use two-color counters and modeling to demonstrate their understanding of both counting and modeling) (K.CC.B.4).
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. 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 attend to procedural skill and fluency. Students are given multiple times to practice material through various worksheets and games. The design of the materials allows students to attain the fluencies and procedural skills required by the Standards. Each lesson begins with a Fluency Builder exercise and within each lesson there are ample procedural skill practice problems. In Lesson 5.8 there are multiple practice problems to help students develop fluency with writing and creating number pairs for 5. (K.OA.A.5) Each lesson also has a spiral review that requires students to count or do a skill that was in an earlier chapter or lesson.

[5] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[6] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	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, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Application problems particularly stress applying the Major Work of the grade.	**Yes**	Most problems are framed in a real-world concrete setting. This provides young students with the opportunity to see a connection and apply learned concepts to everyday. Lesson 3.9 is devoted to problem solving for numbers to 9 with a connect to adding a specific number onto a given amount (K.OA.2). In another example, Lesson 10.8 uses pictures of real-world environments to demonstrate "above and below" for (K.G.A.1).
	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 treated according to the standards for kindergarten. Places that indicate conceptual understanding, procedural skill and fluency, and application in the standards are addressed as such in the text. Lesson 5.1 through 5.3 uses all three aspects of rigor to address K.OA.A.1 and K.OA.A.2 to add within 10.
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.[7] ☒ Yes ☐ No	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition. Each mathematical practice instructs the teacher on how to incorporate the mathematical practices into the lesson (e.g., teacher instructions in Chapter 1 Lesson 1 states, "MP4 Model with mathematics. Have children use counters to show that two is one more than one. Ask them to tell why counters are a good way to model this idea"). The mathematical practices used are listed at the top of student pages as well (e.g., see Lesson 3.9 where students are encouraged to make sense of problems and persevere in solving them as they examine the numbers of flags on top of a tent.
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
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.[8]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[9]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.[11]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
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.[10] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard.[11] There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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). Materials engage students in problem solving as	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[8] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[9] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[10] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[11] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	a form of argument, attending thoroughly to places in the standards that explicitly set expectations for multi-step problems. [12]		
	6c) Materials explicitly attend to the specialized language of mathematics.[12]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
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. [13] ☐ 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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7f) There is variety in the pacing and grain size of content coverage.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[12] Refer also to criterion #10 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[13] Refer also to pages 18-20 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

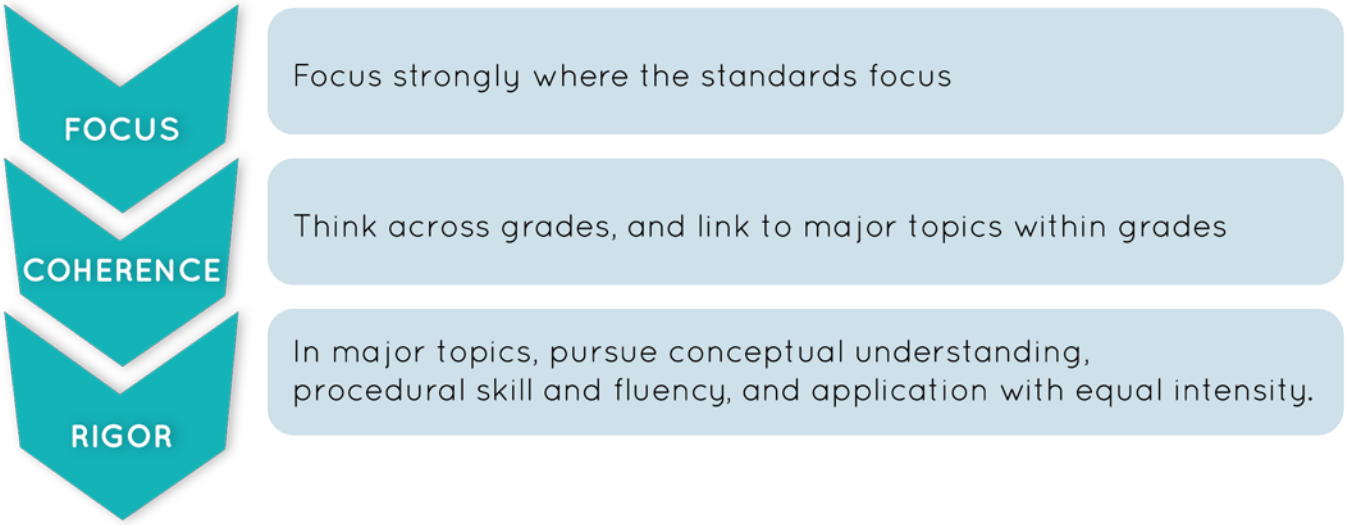
FINAL EVALUATION
Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the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

Compile the results for Sections I and II to make a final decision for the material under review.

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	**No**	The materials only devote about 68% of content to the focus of major work on kindergarten major clusters.
	2. Consistent, Coherent Content	**Yes**	The materials develop conceptual understanding of key concepts by offering Learning Progressions and Content Standards that list the Common Core Learning Progressions across the grades. Materials connect major content to supporting content in meaningful ways. Materials also connect clusters in a domain.
	3. Rigor and Balance	**Yes**	The lessons provide different tier levels of practice as well as extension activities. Materials have conceptual understanding, practice with procedural skills and fluency, and application throughout the units.
	4. Focus and Coherence via Practice Standards	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	6. Alignment Criteria for Standards for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7. Indicators of Quality	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: **Tier III, Not representing quality**			

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **1**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
2. Consistent, Coherent Content (Non-Negotiable)	1. Focus on Major Work (Non-Negotiable)
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
Non-Negotiable 1. FOCUS ON MAJOR WORK[14]: Students and teachers using the materials as designed devote the large majority[15] of time in each grade K–8 to the major work of the grade. ☐ Yes ☒ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade. Each grade must meet the criterion; do not average across two or more grades.	**No**	Materials do not devote the large majority of class time to the major work of the grade. Students spend a disproportionate amount of time on supporting and additional clusters. The book contains 12 Chapters with 101 Lessons total. Eight Chapters (70 Lessons) are entirely devoted to the major work of 1st grade with another 5 Lessons from another Chapter to make a total of 75 Lessons devoted to the major work of 1st grade. The remaining 26 Lessons are devoted to supporting and/or additional clusters. Only 74% of the Lessons focus on the major work of 1st grade when this percentage should be closer to 85%.
	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.[16]	**Yes**	Minimal time is spent on content outside of 1st grade, and no assessment items hold students responsible for content above that of 1st grade. It should be noted that 1.G.A.1 is not adequately assessed on either the Chapter 11 or Chapter 12 Test. Students are never asked to distinguish between defining and nondefining attributes as is the explicit expectation of the Standard.
Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course's instructional materials are coherent and consistent with the content in the standards.	**REQUIRED** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.[17]	**Yes**	Materials connect supporting content to major content in meaningful ways. Many of the clusters are presented in isolation within a chapter. However, an effort is made to connect the content when appropriate (e.g., see Chapter 10, lesson 1 where students use data to solve problems (1.MD.C.4). Students must interpret data and must represent and solve addition problems in the data (1.OA.A.1)).

[14] For more on the major work of the grade, see Focus by Grade Level.
[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%.
[16] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[17] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
☒ Yes ☐ No			
	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. [18]	**Yes**	Materials include problems and activities that serve to connect two or more clusters in a domain. However, it should be noted that none of the domains are combined in any of the chapters. Lesson 6.8, Show Numbers in Different Ways connects major content in meaningful ways. Students use base 10 blocks to represent numbers (1.NBT.B.2). Students can use different representations of the numbers, so they are using place value as well as adding (1.NBT.C.4). (e.g., see connections in Chapter 3 among 1.OA.A.2, 1.OA.B.3, 1.OA.C5, and 1.OA.C6.)
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.[19] ☒ 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 conceptual discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts using a variety of manipulatives (e.g., students are asked to represent place value using models). The materials develop conceptual understanding of key mathematical concepts and amply feature high-quality conceptual problems and conceptual discussion questions. Throughout the text, there is an emphasis placed on modeling (e.g., see Chapter 6 where there are multiple hands-on lessons where students use connecting cubes and modeling to demonstrate their understanding of counting and modeling). In Lesson 6.4, students use snap cubes to make tens and ones when counting (1.NBT.B.2). They are also to draw representations of numbers using tens and ones, developing conceptual understanding of counting using tens.

[18] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[19] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. 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 attend to procedural skill and fluency. Students are given multiple times to practice material through various worksheets and games. The design of the materials allows students to attain the fluencies and procedural skills required by the Standards. Each lesson begins with a Fluency Builder exercise and within each lesson there are ample procedural skill practice problems (e.g., see Lesson 8.10 where there are many skill practice problems to help students develop fluency with addition and subtraction (1.NBT.C.4 and 1.NBT.C.6)).
	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, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Application problems particularly stress applying the Major Work of the grade.	**Yes**	Most problems are framed in a real-world concrete setting. This provides young students with the opportunity to see a connection and apply learned concepts to everyday (e.g., see Chapters 1 and 2, where students model with word problems using concrete objects or pictures (pg. 123) to solve addition and subtraction problems for 1.OA.A.1.)
	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 treated according to the standards for 1st Grade. Places that indicate conceptual understanding, procedural skill and fluency, and application in the standards are addressed as such in the text. For example, Lesson 9.3 through 9.5 use all three aspects of rigor to address 1.MD.A.2 to measure objects.
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.[20]	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition. Each mathematical practice instructs the teacher how to incorporate the mathematical practices into the lesson (e.g., teacher instructions in Chapter 8 Lesson 7 states, "MP1 Make sense of problems and persevere in solving them. Use Math Talk to focus on children's

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
☒ Yes ☐ No			understanding of adding tens to tens and ones to ones when adding two-digit numbers.”). The mathematical practices used are listed at the top of student pages as well. (e.g., see Lesson 1.2 where students are encouraged to use appropriate tools strategically by using connecting cubes to model a given scenario).
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.[21]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[22]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.[11]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful	**REQUIRED** **6a)** Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.[23] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[21] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[22] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[23] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
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	problems that stimulate students to develop the habits of mind described in the practice standard.[24] There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.		
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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). 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. [25]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	6c) Materials explicitly attend to the specialized language of mathematics.[12]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.were not met.
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. [26] ☐ 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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[24] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[25] Refer also to criterion #10 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[26] Refer also to pages 18-20 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.		
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7f) There is variety in the pacing and grain size of content coverage.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

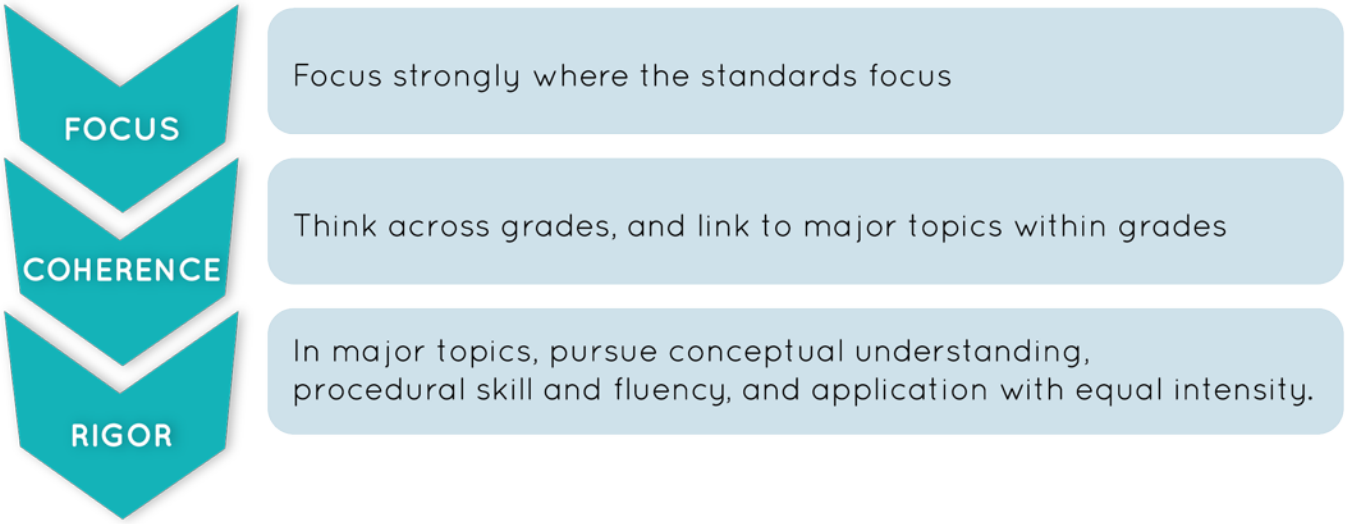
FINAL EVALUATION
Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the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

Compile the results for Sections I and II to make a final decision for the material under review.

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	**No**	Materials do not devote the larger majority of class time to the major work of the grade (74%), however no material outside the scope of 1st grade is present on assessments.
	2. Consistent, Coherent Content	**Yes**	The materials develop conceptual understanding of key concepts by offering Learning Progressions and Content Standards that list the Common Core Learning Progressions across the grades. Materials connect supporting content to major content in meaningful ways. Materials include problems and activities that serve to connect two or more clusters in a domain.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	3. Rigor and Balance	**Yes**	The lessons provide different tier levels of practice as well as extension activities. Materials have conceptual understanding, practice with procedural skills and fluency, and application throughout the units.
	4. Focus and Coherence via Practice Standards	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	6. Alignment Criteria for Standards for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7. Indicators of Quality	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: **Tier III, Not representing quality**			

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **2**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
2. Consistent, Coherent Content (Non-Negotiable)	1. Focus on Major Work (Non-Negotiable)
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
Non-Negotiable 1. FOCUS ON MAJOR WORK[27]: Students and teachers using the materials as designed devote the large majority[28] of time in each grade K–8 to the major work of the grade. ☐ Yes ☒ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade. Each grade must meet the criterion; do not average across two or more grades.	**No**	Materials do not devote the large majority of class time to the major work of the grade. Students spend a disproportionate amount of time on supporting and additional clusters. The book contains 11 Chapters with 109 Lessons total. 76 Lessons are devoted to the major work of 2nd grade while the remaining 33 Lessons are devoted to supporting and/or additional clusters. Only 70% of the Lessons focus on the major work of 2nd grade when this percentage should be closer to 85%.
	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.[29]	**No**	2.NBT.B.5 and 2.NBT.B.7 expects students to find sums and differences of whole numbers using strategies that are grounded in conceptual understanding or acquired fluency, not procedural skill and algorithms; however, in Chapters 5 and 6, the book directs students to the standard algorithm for adding and subtracting multi-digit whole numbers. This standard algorithm is not an explicit expectation until 4th grade (see 4.NBT.B.4) and should not be assessed prior to the grade in which it is the explicit expectation. Furthermore, problems 8, 9, and 14 on the Chapter 5 Test and problem 10 on the Chapter 6 Test expect students to calculate sums and differences using the standard algorithm. Students must also determine and draw a picture showing how to share 12 pencils with another classmate (see Test 3, item 11). This question addresses 3.0A.A.2, partitioning objects into shares in preparation for division. In the Chapter 11 Test, problem 5, students must partition a triangle into halves; however, 2.GA.3 specifically calls for partitioning circles and rectangles.

[27] For more on the major work of the grade, see Focus by Grade Level.
[28] 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%.
[29] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
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.[30]	**Yes**	Materials connect supporting content to major content in meaningful ways. Many of the clusters are presented in isolation within a chapter. However, an effort is made to connect the content when appropriate (e.g., Chapter 5 combines content from 2.NBT and 2.OA; and in Chapter 1, spirals among standards 2.OA.C.3, 2.NBT.A.2, and 2.NBT.A.3).
	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. [31]	**Yes**	Materials include problems and activities that serve to connect two or more clusters in a domain (e.g., see Lesson 9.4 where students are measuring (2.MD.A.2), representing, and solving problems using both addition and subtraction (2.MD.B.5). This example represents a connection between two major clusters).
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.[32] ☒ 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 conceptual discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts using a variety of manipulatives (e.g., students are asked to represent place value using models for all problems and conceptual discussion questions). In Lesson 2.3 students use base-ten blocks to represent a number and draw to show what they did (2.NBT.A.1). In Lesson 4.6 conceptual understanding is develop by breaking numbers apart in order to add 2 digit numbers together (2.NBT.B.9). This helps develop important conceptual understanding for students.
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills	**Yes**	The design of the materials allows students to attain the fluencies and procedural skills required by the Standards. Each lesson begins with a Fluency Builder

[30] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[31] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[32] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.		exercise and within each lesson there are ample procedural skill practice problems (e.g., see Lesson 5.6 where there are many skill practice problems to help students develop fluency with 2-digit subtraction and Lesson 4.7 which provides students with fluency practice and skill of adding 2-two digit numbers together; 2.NBT.B.5).
	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, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Application problems particularly stress applying the Major Work of the grade.	**Yes**	Students and teachers spend sufficient time working with engaging applications without losing focus on the major work of the grade (e.g., see Lesson 7.7 devoted to problem solving with money; 2.MD.C.8).
	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 treated according to the standards for 2nd Grade. Places that indicate conceptual understanding, procedural skill and fluency, and application in the standards are addressed as such in the text. For example, Chapter 10 uses all three aspects of rigor to address 2.MD.D.10 as students read and make picture and bar graphs.
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.[33] ☒ Yes ☐ No	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition. Each mathematical practice instructs the teacher how to incorporate the mathematical practices into the lesson (e.g., teacher instructions in Chapter 4 Lesson 6 states, "MP8 Look for and express regularity in repeated reasoning. To extend the children's thinking," it states, "write these problems on the board, then ask children to find and correct the error in each.").

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
			The mathematical practices used are listed at the top of student pages as well (e.g., see Lesson 9.5 where students must attend to precision when using measurement tools to find the measure of objects in the classroom in centimeters and meters). In the student edition, there are places where the mathematical practices are said to be used and most of the times, they strengthen the work. However, sometimes it isn't enhancing the specific Standard (e.g., see page 479 where students are asked to describe the value of the 3 coins and compare. While this is an activity that could be beneficial, it is not necessarily a correctly labeled mathematical practice in the student edition).
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.[34]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[35]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.[11]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[34] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[35] 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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
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.[36] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard.[37] There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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). 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. [38]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	6c) Materials explicitly attend to the specialized language of mathematics.[12]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met..
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. [39] ☐ 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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[36] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[37] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[38] Refer also to criterion #10 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[39] Refer also to pages 18-20 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7f) There is variety in the pacing and grain size of content coverage.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

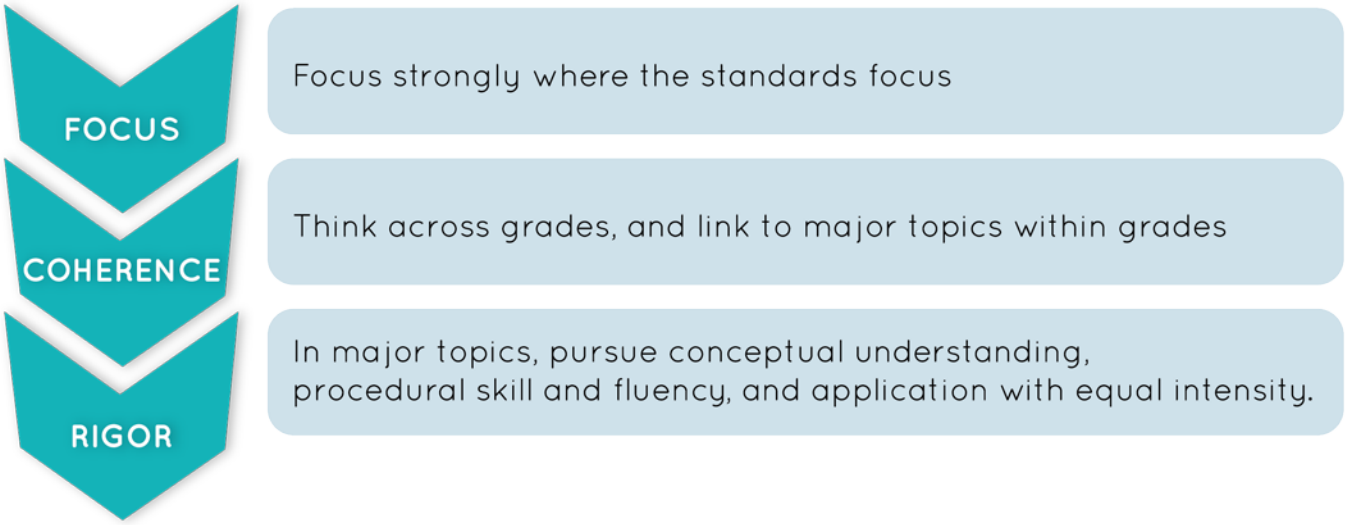
FINAL EVALUATION
Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the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

Compile the results for Sections I and II to make a final decision for the material under review.

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	**No**	Materials spend too much time outside of grade level (70%), however students are also introduced to the standard algorithm for addition and subtraction which is outside the scope of content for 2nd grade.
	2. Consistent, Coherent Content	**Yes**	The materials develop conceptual understanding of key concepts by offering Learning Progressions and Content Standards that list the Common Core Learning Progressions across the grades. Materials

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
			connect supporting content to major content in meaningful ways. Materials include problems and activities that serve to connect two or more clusters in a domain.
	3. Rigor and Balance	**Yes**	The lessons provide different tier levels of practice as well as extension activities. Materials provide conceptual understanding, practice with procedural skills and fluency, and application throughout the units.
	4. Focus and Coherence via Practice Standards	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	6. Alignment Criteria for Standards for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7. Indicators of Quality	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: Tier III, Not representing quality			

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **3**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
3. Rigor and Balance (Non-Negotiable)	1. Focus on Major Work (Non-Negotiable)
4. Focus Coh. via Practice Std (Non-Negotiable)	2. Consistent, Coherent Content (Non-Negotiable)

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
Non-Negotiable 1. FOCUS ON MAJOR WORK[40]: Students and teachers using the materials as designed devote the large majority[41] of time in each grade K–8 to the major work of the grade. ☐ Yes ☒ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade. Each grade must meet the criterion; do not average across two or more grades.	**No**	Materials do not devote the large majority of class time to the major work of the grade. Students spend a disproportionate amount of time on supporting and additional clusters. The book contains 12 Chapters with 105 Lessons total. 70 Lessons are devoted to the major work of 3rd grade while the remaining 35 Lessons are devoted to supporting and/or additional clusters. Only 67% of the Lessons focus on the major work of 3rd grade when this percentage should be closer to 75 or 80%.
	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.[42]	**No**	3.NF.A.3d explicitly calls for comparison of fractions with either the same numerator or same denominator; however, problems #4, 5, 15, and 19 on the Chapter 9 Test expect students to compare fractions with unlike numerators and denominators by examining the "missing piece." Albeit a good strategy, it is not aligned to the expectation of 3rd grade, and problems with this expectation are reserved for 4th grade (see 4.NF.A.2).
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.[43]	**No**	Materials do not connect supporting content to major content in meaningful ways. Many of the clusters are presented in isolation within a chapter. Lesson 2.6 attempted to connect 3.OA.D.8 to 3.MD.B.3, however students are not creating the scaled bar graphs or picture graphs. In this lesson students are solving two-step problems based on given graphs, instead of using the four operations as required by the standards.

[40] For more on the major work of the grade, see Focus by Grade Level.
[41] 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%.
[42] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[43] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	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. [44]	**Yes**	The focus and coherence in Go Math Grade 3 is appropriate for a third grade student. For example, Chapter 6 Lessons 7 and 8 help explain the connections between multiplication and division. However, describing other natural connections in the student edition, such as addition and subtraction problems related to bar graphs, should be left to the discretion of the teacher. This additional information could confuse or overwhelm 3rd grade students. Support for making such connections are found in the Teacher Edition.
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.[45] ☒ 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 conceptual discussion questions.	**Yes**	The materials develop conceptual understanding of key mathematical concepts and amply feature high-quality conceptual problems and conceptual discussion questions (e.g., Lesson 3.2 where students reason about connections between multiplication and addition using drawing and models (3.OA.A.1). Chapter 3, as a whole, is devoted to developing conceptual understanding of multiplication. Real world models and counters are used in order to make sense of multiplication).
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	The design of the materials allows students to attain the fluencies and procedural skills required by the Standards. Each lesson begins with a Fluency Builder exercise and within each lesson there are ample procedural skill practice problems (e.g., in Lesson 4.5, 4.8, and 5.9 students use a variety of strategies to fluently multiply and divide within 100 for 3.OA.C.7).
	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	**Yes**	Most problems are framed in a real-world concrete setting. This provides young students with the opportunity to see a connection and apply learned concepts to everyday. Students and teachers spend sufficient time working with engaging applications

[44] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[45] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Application problems particularly stress applying the Major Work of the grade.		without losing focus on the major work of the grade In Lesson 4.2 students solve multiplication problems using word problems for 3.OA.A.3.
	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 treated according to the standards for 3rd Grade. Places that indicate conceptual understanding, procedural skill and fluency, and application in the standards are addressed as such in the text. Lesson 11.6 through 11.8 use all three aspects of rigor to address 3.MD.C.7 as students relate area to multiplication and addition.
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.[46] ☒ Yes ☐ No	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition. Each mathematical practice instructs the teacher how to incorporate the mathematical practices into the lesson (e.g., . see Chapter 7, Lesson 8, linked to MP2 "reason abstractly and quantitatively"). Exercise 22 requires students to formulate a word problem for a division fact (e.g., "Students can write a sharing or measurement division problem"). The mathematical practices used are also listed at the top of student pages (e.g., see Chapter 7, page 8, where students are asked to describe each of the three methods they used in order to find the area of a rectangle). In Lesson 9.6, students are encouraged to use appropriate tools strategically to model equivalent fractions with a paper folding activity.
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
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.[47]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[48]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.[11]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
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.[49] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard.[50] There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[47] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[48] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[49] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[50] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	standards (cf. MP.3). 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. [51]		
	6c) Materials explicitly attend to the specialized language of mathematics.[12]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
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. [52]	**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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
☐ 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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7f) There is variety in the pacing and grain size of content coverage.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[51] Refer also to criterion #10 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[52] Refer also to pages 18-20 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

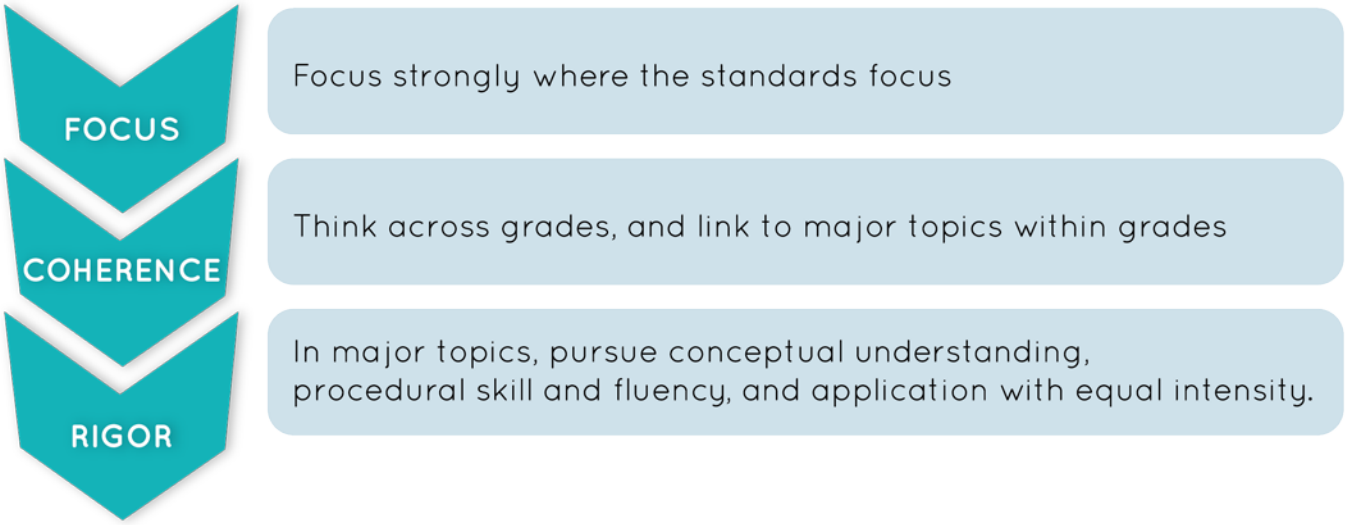
FINAL EVALUATION
Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the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

Compile the results for Sections I and II to make a final decision for the material under review.

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	**No**	67% of the major work is supported by the text, while Chapter 9 test has students compare fractions with unlike denominators which is not introduced in the 3rd grade standards.
	2. Consistent, Coherent Content	**No**	Supporting work does not support the major work of the grade. Multiplication and division are treated separately, as separate chapters. Connections between major clusters should be more defined.
	3. Rigor and Balance	**Yes**	The lessons provide different tier levels of practice as well as extension activities. Materials have conceptual understanding, practice with procedural skills and fluency, and application throughout the units.
	4. Focus and Coherence via Practice Standards	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	6. Alignment Criteria for Standards for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	7. Indicators of Quality	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: Tier III, Not representing quality			

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **4**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
3. Rigor and Balance (Non-Negotiable)	1. Focus on Major Work (Non-Negotiable)
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
Non-Negotiable 1. FOCUS ON MAJOR WORK[53]: Students and teachers using the materials as designed devote the large majority[54] of time in each grade K–8 to the major work of the grade. ☐ Yes ☒ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade. Each grade must meet the criterion; do not average across two or more grades.	**No**	Materials do not devote the large majority of class time to the major work of the grade. Students spend a disproportionate amount of time on supporting and additional clusters. The book contains 13 Chapters with 103 Lessons total. 68 Lessons are devoted to the major work of 4th grade while the remaining 35 Lessons are devoted to supporting and/or additional clusters. Only 66% of the Lessons focus on the major work of 4th grade when this percentage should be closer to 70 or 75%.
	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.[55]	**Yes**	Although a diagnostic test is available under the teacher resources, no assessments make teachers or students responsible for any topics before the grade in which they are introduced in the standards. Minimal time is spent on content outside of 4th grade, and no assessment items hold students responsible for content above that of 4th grade. It should be noted that problem #5 on the Chapter 12 Test uses unit fractions other than the unit fractions explicitly called for by the standard, 4.MD.B.4. Also, it should be noted that all assessment items for 4.NBT.A.1 on Chapter 1 Test do not assess the Standard, rather they assess foundational skills necessary for mastery of 4.NBT.A.1. Similarly, the assessment items for 4.OA.C.5 on the Chapter 10 Test do not align to the expectation of the Standard as they expect students to find a missing term in a given number or shape pattern without being

[53] For more on the major work of the grade, see Focus by Grade Level.
[54] 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%.
[55] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
			provided the rule of the pattern.
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.[56]	**Yes**	Materials connect supporting content to major content in meaningful ways. Many of the clusters are presented in isolation within a chapter. However, an effort is made to connect the content when appropriate (e.g., Lesson 5.3 connects factors (4.OA.B.4) to multiplication (4.NBT.B.5) using word problems.)
	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. [57]	**Yes**	Materials include problems and activities that serve to connect two or more clusters in a domain. For example, Lesson 7.3 "Add Fractions Using Models" connects two 4th grade domains: "Measurement and Data" and "Number and Operations - Fractions".
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.[58]	**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 conceptual discussion questions.	**Yes**	The materials develop conceptual understanding of key mathematical concepts and amply feature high-quality conceptual problems and conceptual discussion questions. For example, in Lesson 9.1 students relate tenths and decimals using area models, tables, and numbers lines (4.NF.C.6) Also, students add and subtract fractions using fraction strips and circles in 7.1 for 4.NF.B.3a.
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the	**Yes**	The design of the materials allows students to attain the fluencies and procedural skills required by the Standards. Students are given multiple opportunities to practice material through various worksheets and

[56] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[57] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[58] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
☒ Yes ☐ No	year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.		games. Each lesson begins with a Fluency Builder exercise and within each lesson there are ample procedural skill practice problems (e.g., see Lesson 1.6 and 1.7 where students add and subtract multi-digit whole numbers for 4.NBT.B.4.)
	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, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Application problems particularly stress applying the Major Work of the grade.	**Yes**	Most problems are framed in a real-world concrete setting. This provides young students with the opportunity to see a connection and apply learned concepts to everyday. Students and teachers spend sufficient time working with engaging applications without losing focus on the major work of the grade (e.g., see Lesson 8.4 where students complete a series of problems on multiplying a fraction or mixed number by a whole number using information gathered from a recipe for sidewalk chalk (4.NF.B.4c)).
	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 treated according to the standards for 4th Grade. Places that indicate conceptual understanding, procedural skill and fluency, and application in the standards are addressed as such in the text. For example Lessons 11.4 and 11.5, use 4.MD.C.7 and all three aspects of rigor to add and subtract angle amounts.
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.[59]	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition. Each mathematical practice instructs the teacher how to incorporate the Mathematical Practices into the lesson (e.g., see teacher instructions in Chapter 7, Lesson 5 which states, "MP6 Attend to precision. Have students read Exercise 15. Students may want to first identify

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
☒ Yes ☐ No			the operation and method they are going to use to find the answer. Discuss with students which method they prefer and why.") In addition, the mathematical practices used are listed at the top of student pages (e.g., see Lesson 3.5 where students are asked to construct a viable argument and critique the reasoning of others comparing two students' strategies for multiplying whole numbers).
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.[60]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[61]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.[11]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[60] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[61] 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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
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.[62] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard.[63] There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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). 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. [64]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	6c) Materials explicitly attend to the specialized language of mathematics.[12]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met..
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. [65]	**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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	REQUIRED	**Not Evaluated**	This section was not evaluated because the non-

[62] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[63] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[64] Refer also to criterion #10 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[65] Refer also to pages 18-20 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
☐ Yes ☐ No	**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.		negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7f) There is variety in the pacing and grain size of content coverage.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

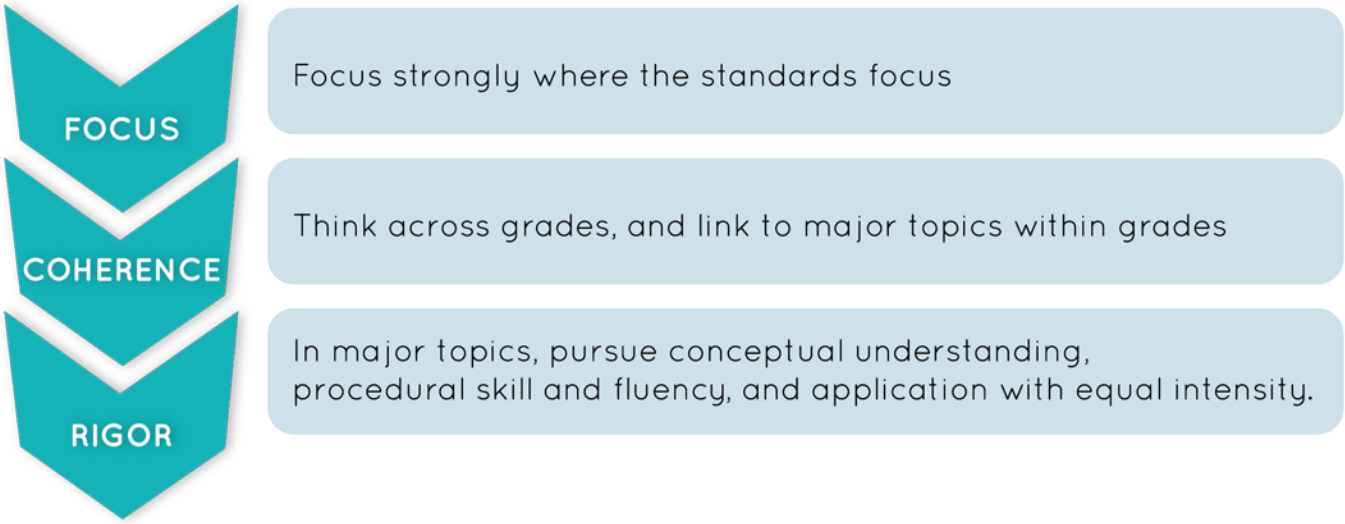
FINAL EVALUATION
Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the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

Compile the results for Sections I and II to make a final decision for the material under review.

Section	Criteria	Yes/No	Final Justification/Comments

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
I: Non-Negotiables	1. Focus on Major Work	**No**	Only 66% of time is spent on the major work of 4th grade. Assessments do not contain material beyond the scope of 4th grade.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so focus and coherence are enhanced throughout the year.
	3. Rigor and Balance	**Yes**	Materials contain a balance of rigor. Conceptual understanding, procedural skills and fluency, and application are addressed appropriately as needed by the standards addressed in the 4th grade.
	4. Focus and Coherence via Practice Standards	**Yes**	The practice standards are connected to the content in a way that promotes focus and coherence.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	6. Alignment Criteria for Standards for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7. Indicators of Quality	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: **Tier III, Not representing quality**			

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **5**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
2. Consistent, Coherent Content (Non-Negotiable)	1. Focus on Major Work (Non-Negotiable)
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
Non-Negotiable 1. FOCUS ON MAJOR WORK[66]: Students and teachers using the materials as designed devote the large majority[67] of time in each grade K–8 to the major work of the grade. ☐ Yes ☒ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade. Each grade must meet the criterion; do not average across two or more grades.	**Yes**	Materials do spend a majority of time on the major work of 5th grade. The book contains 11 Chapters with a total of 99 Lessons. Of the total 99 Lessons, 78 Lessons are devoted to the major work of 5th grade making approximately 79% of this book devoted to major work.
	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.[68]	**No**	Although a diagnostic test is available under the teacher resources, assessments make teachers or students responsible for topics before the grade in which they are introduced in the standards. 5.NBT.B.6 expects students to find quotients of whole numbers using strategies that are grounded in conceptual understanding, not procedural skill and algorithms; however, in Chapter 2 when division is introduced, the book directs students first to the standard algorithm. The standard algorithm for division is not the explicit expectation until 6th grade (see 6.NS.B.2), and, as such, should not be assessed prior to the grade in which it is the explicit expectation. Furthermore, problem #11 on the Chapter 2 Test expects students to divide using the standard algorithm and again in problem #11 on the Chapter 5 Test.
Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course's instructional materials are coherent and consistent with the content in the standards.	**REQUIRED** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.[69]	**Yes**	Materials connect supporting content to major content in meaningful ways. Chapter 10 addresses supporting standard 5.MD.A.1 where students are to convert amount different-standard measurement units within a given measurement system. Lessons 10.3 and 10.6 use 5.NF.B.6 and 5.NF.B.4 as well as 5.MD.A.1 to allow students to solve problems using

[66] For more on the major work of the grade, see Focus by Grade Level.
[67] 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%.
[68] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[69] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
☒ Yes ☐ No			conversion with fractions and whole numbers.
	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. [70]	**Yes**	Materials include problems and activities that serve to connect two or more clusters in a domain. For example, in lesson 4.1 where students use multiplication patterns with decimals demonstrates the connection of two clusters under a domain (5.NBT.A.2 and 5.NBT.B.7).
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.[71] ☒ 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 conceptual discussion questions.	**Yes**	The materials develop conceptual understanding of key mathematical concepts and amply feature high-quality conceptual problems and conceptual discussion questions (e.g., students multiply fractions using fraction bars). In Lesson 6.1, students complete an investigation activity with fraction strips and a Math Board to discover how to use models to add fractions with different denominators 5.NF.A.1 and 5.NF.A.2.
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	The design of the materials allow students to attain the fluencies and procedural skills required by the Standards. Students are given multiple opportunities to practice material through various worksheets and games. Each lesson begins with a Fluency Builder exercise and within each lesson there are ample procedural skill practice problems (e.g., see Lessons 1.6 and 1.7 where there are skill practice problems to help students develop fluency with multiplying multi-digit whole numbers (5.NBT.B.5) .
	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	**Yes**	Most problems are framed in a real-world concrete setting. This provides young students with the opportunity to see a connection and apply learned concepts to everyday (e.g., see Lesson 10.4 where

[70] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[71] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Application problems particularly stress applying the Major Work of the grade.		students complete multi-step measurement problems with scenarios such as points scored in a soccer game or the weight of animals at a zoo(5.MD.A.1)).
	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 treated according to the standards for 5th Grade. Places that indicate conceptual understanding, procedural skill and fluency, and application in the standards are addressed as such in the text. For example, Lesson 11.4 uses the three aspects of rigor to discuss volume for 5.MD.C.5.
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.[72] ☒ Yes ☐ No	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition. Each mathematical practice instructs the teacher how to incorporate the Mathematical Practices into the lesson (e.g., teacher instructions in Chapter 7, Lesson 3 state, "MP4 Model with mathematics. How else could we draw a model to show this problem?") In addition, the mathematical practices used are listed at the top of student pages (e.g., see Lesson 1.1 where students are asked to look for and make use of structure by using base-10 blocks to understand the relationships among place-value positions).
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	**REQUIRED** **5a)** Materials base content progressions on the grade-by-grade progressions in the Standards.[73]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[72] Refer also to criterion #8 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013)
[73] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
grades by staying consistent with the progressions in the standards. ☐ Yes ☐ No	can see what their specific responsibility is for the current year.[10]		
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[74]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. [11]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
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.[75] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard.[76] There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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). 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. [77]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	6c) Materials explicitly attend to the specialized language of mathematics.[12]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

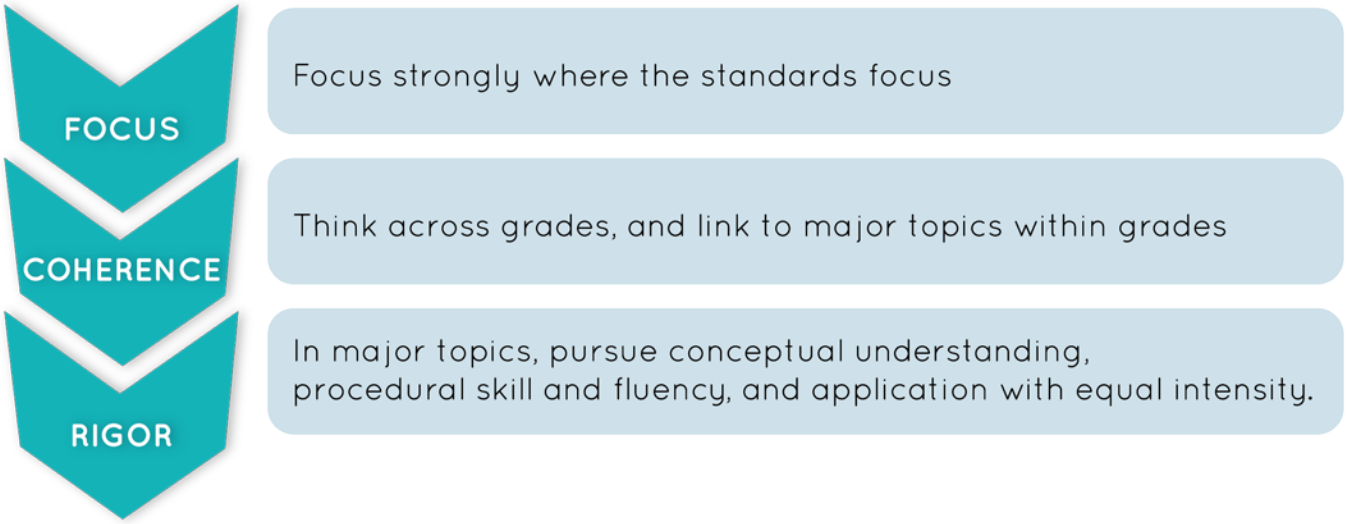
[74] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[75] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[76] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[77] 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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
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. [78]	**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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
☐ 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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7f) There is variety in the pacing and grain size of content coverage.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[78] Refer also to pages 18-20 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
FINAL EVALUATION ***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.			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**
I: Non-Negotiables	1. Focus on Major Work	**No**	Minimal time is spent on outside content. The majority of student and teacher work is spent completing material appropriate for the 5th grade. However, content beyond the scope of 5th grade is present on assessments.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so focus and coherence are enhanced throughout the year.
	3. Rigor and Balance	**Yes**	Materials contain a balance of rigor. Conceptual understanding, procedural skills and fluency, and application are addressed appropriately as needed by the standards addressed in the 5th grade.
	4. Focus and Coherence via Practice Standards	**Yes**	The practice standards are connected to the content in a way that promotes focus and coherence.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	6. Alignment Criteria for Standards for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7. Indicators of Quality	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: **Tier III, Not representing quality**			

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **6**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
2. Consistent, Coherent Content (Non-Negotiable)	1. Focus on Major Work (Non-Negotiable)
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
Non-Negotiable 1. FOCUS ON MAJOR WORK[79]: Students and teachers using the materials as designed devote the large majority[80] of time in each grade K–8 to the major work of the grade. ☐ Yes ☒ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade. Each grade must meet the criterion; do not average across two or more grades.	**No**	Materials do not devote the larger majority of class time to the major work of the grade. Students spend a disproportionate amount of time on supporting and additional standards. The book contains 13 Chapters with a total of 104 Lessons. Of the 13 Chapters, 5 Chapters (41 Lessons) and an additional 2 Lessons from another Chapter are devoted entirely to either supporting or additional clusters for 6th grade. The remaining 8 chapters (61 lessons) are devoted to major clusters. Approximately 59% of the Lessons are spent on content aligned to the major work of the 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.[81]	**Yes**	Although a diagnostic test is available under the teacher resources, no assessments make teachers or students responsible for any topics before the grade in which they are introduced in the standards. There are a number of assessment items in the first few chapters that focus more on fifth grade standards. Minimal time is spent on content outside of 6th grade, and, of the content not aligned to 6th grade standards, none of it addresses content from higher grades or courses. The content outside of 6th grade comes from 4th and 5th grade as is the case in Chapter 2, Lessons 1-2 where students are ordering and comparing fractions and decimals. These Lessons have 6.NS.C.7 as the focus standard, but the Lessons do not include any negative numbers. The focus of 6.NS.C is extending students' understanding of the number line to include negative values. These Lessons merely review and slightly extend the work with fractions and decimals from 4th and 5th grade. Although students are not assessed on any topic

[79] For more on the major work of the grade, see Focus by Grade Level.
[80] 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%.
[81] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
			that is beyond the scope of 6th grade, it should be noted that not all assessment items reflect on grade-level work as several items in the beginning Chapters are more appropriate for 4th and/or 5th grade than 6th grade (see problems 5 and 6 on Chapter 1 Test as an example).
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.[82]	**Yes**	Materials connect supporting content to major content in meaningful ways. Many of the clusters are presented in isolation within a chapter. However, an effort is made to connect the content when appropriate. For example, Chapter 10 has numerous lessons that combine Geometry, which is a supporting content to Expressions and Equations, which is major content (6.GA.2 and 6.EE.B.6). Lesson 10.9 Figures on a Coordinate Plane uses 6.G.A.3 with 6.NS.C.6 and 6.NS.C.8.
	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. [83]	**Yes**	Materials include problems and activities that serve to connect two or more clusters in a domain. Lesson 12.6, connects two domains in 6th grade (6.SP.B.5 and 6.NS.B.3) as students find measures of center while practicing fluency for using all four operations with multi-digit decimals.
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.[84]	**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 conceptual discussion questions.	**Yes**	The materials develop conceptual understanding of key mathematical concepts and amply feature high-quality conceptual problems and conceptual discussion questions. Section 8.3 (6.EE.B.6 and 6.EE.B.7), students are investigating modeling equations. Students are using Algebra Tiles as a tool for conceptual understanding on solving equations.
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are	**Yes**	The design of the materials allow students to attain the fluencies and procedural skills required by the

[82] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[83] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[84] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
☒ Yes ☐ No	designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.		Standards. Students are given multiple opportunities to practice material through various worksheets and games. Each lesson begins with a Fluency Builder exercise (ex. pg. 681B for 6.NS.B.3) and within each lesson there are ample procedural skill practice problems. An example of this can be found in Lesson 1.6 through 1.9 where students use all four operations using multi-digit decimals (6.NS.B.3). There is sufficient procedural skill for students to master this skill in Lessons 1.6 through 1.9 and the fluency builders that follow.
	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, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Application problems particularly stress applying the Major Work of the grade.	**Yes**	Most problems are framed in a real-world concrete setting. This provides young students with the opportunity to see a connection and apply learned concepts to everyday. Lesson 8.7 uses application to solve equations with fractions for 6.EE.B.7.
	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 treated according to the standards for 6th Grade. Places that indicate conceptual understanding, procedural skill and fluency, and application in the standards are addressed as such in the text. For example, Lesson 10.9 addresses 6.G.A.3 using conceptual understanding, fluency, and application to draw polygons in the coordinate plane and find distances.
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: Materials promote focus and coherence by connecting practice	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition. Each mathematical practice instructs the teacher how to incorporate the Mathematical Practices into the lesson. For example, Chapter 6, Lesson 3 in the teacher edition

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
standards with content that is emphasized in the Standards.[85] ☒ Yes ☐ No			has additional questions to ask demonstrating MP4 and MP2. It gives the questions, the Mathematical Practices it is addressing, and possible answers. The Mathematical Practices used are listed at the top of student pages as well and have questions that are asked that specifically say which Mathematical Practice it is. The same lesson 6.3 has an example of this where students are required to explain.
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.[86]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[87]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.[11]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful	**REQUIRED** **6a)** Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.[88] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[85] Refer also to criterion #8 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013)
[86] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[87] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[88] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
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	problems that stimulate students to develop the habits of mind described in the practice standard.[89] There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.		
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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). 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. [90]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	6c) Materials explicitly attend to the specialized language of mathematics.[12]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
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. [91] ☐ 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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[89] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[90] Refer also to criterion #10 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[91] Refer also to pages 18-20 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.		
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7f) There is variety in the pacing and grain size of content coverage.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

FINAL EVALUATION
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.

Compile the results for Sections I and II to make a final decision for the material under review.

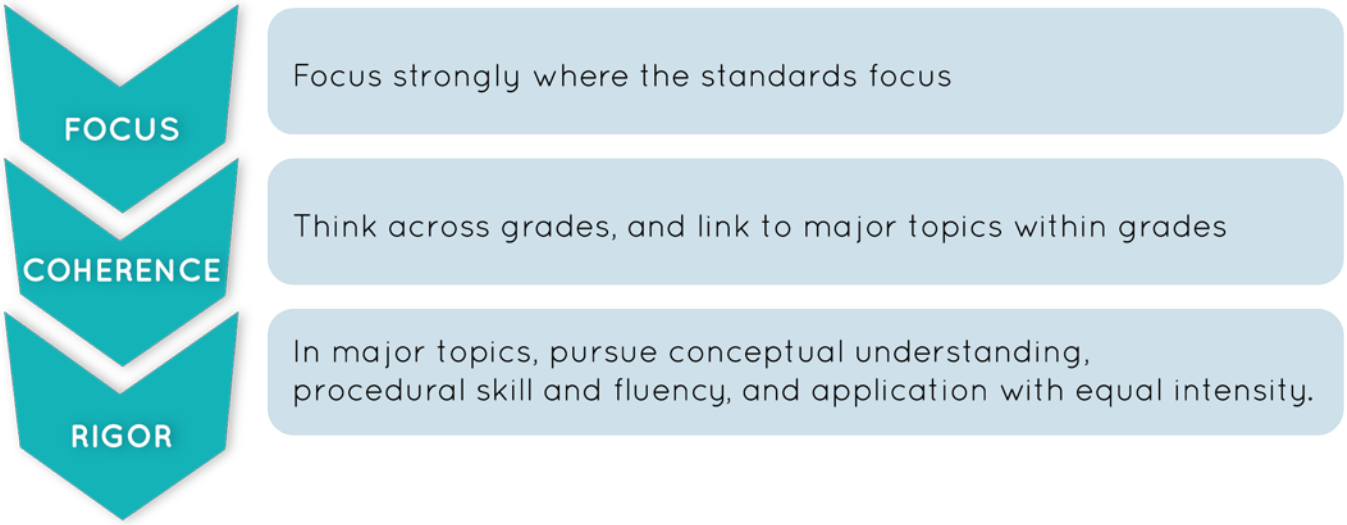
Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	**No**	59% of class time is spent on the major work of the grade, while assessments to do assess content beyond the scope of 6th grade.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so focus and coherence are enhanced throughout the year.
	3. Rigor and Balance	**Yes**	Materials contain a balance of rigor. Conceptual understanding, procedural skills and fluency, and application are addressed appropriately as needed by the standards addressed in the 6th grade.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	4. Focus and Coherence via Practice Standards	**Yes**	The practice standards are connected to the content in a way that promotes focus and coherence.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	6. Alignment Criteria for Standards for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7. Indicators of Quality	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: **Tier III, Not representing quality**			

Appendix I.

Publisher Response

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **K-6**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
2. Consistent, Coherent Content (Non-Negotiable) *	1. Focus on Major Work (Non-Negotiable)
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	
* *Weak at Grade 3*	

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

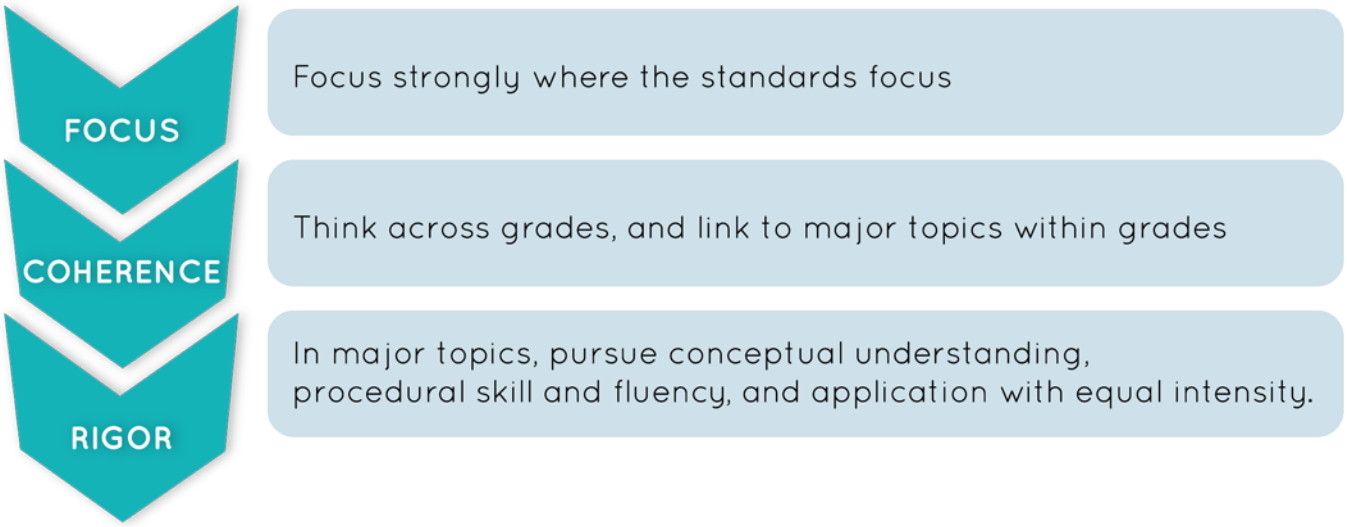
Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

Click below for complete grade-level reviews:

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

Grade 4 (Tier 3) Grade 5 (Tier 3) Grade 6 (Tier 3)

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **K**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
2. Consistent, Coherent Content (Non-Negotiable)	1. Focus on Major Work (Non-Negotiable)
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.				
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 the large majority of class time to the major work of each grade. Each grade must meet the criterion; do not average across two or more grades.	**No**	Materials do not devote the large majority of class time to the major work of the grade. Students spend a disproportionate amount of time on supporting and additional clusters. The book contains 12 Chapters with 100 Lessons total. Eight Chapters (68 Lessons) are devoted to the major work of Kindergarten while the other four Chapters (32 Lessons) are devoted to supporting and/or additional clusters. Only 68% of the Lessons focus on the major work of Kindergarten when this percentage should be closer to 85%.	Many of the lesssons that focus on the major work are intended to be covered over 2 days, as indicated in the suggested pacing charts in the Teacher Edition and Planning Guide. When viewed over the course of a full year's worth of instructional time and not just as a collection of 100 lessons, a typical Grade K classroom using Go Math spends close to 85% of the instructional time on major work. HMH has worked with many districts to develop customized pacing guides based on district goals and the number of teaching days available. We would be happy to do the same for Louisiana districts.
	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**	Minimal time is spent on content outside of Kindergarten, and no assessment items hold students responsible for content above that of Kindergarten.	
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 to major content in meaningful ways. Many of the clusters are presented in isolation within a chapter. However, an effort is made to connect the content when appropriate (e.g., In Lessons 12.1, 12.2, 12.3 and 12.4 students sort objects into categories and count (K.MD.B.3). After sorting the objects students are asked to count them and write the number which is also addressed in standards (K.CC.A.1, K.CC.A.3, K.CC.B.4).	

[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).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	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 serve to connect two or more clusters in a domain (e.g., Chapter 3 makes connections between K.CC.B5 and K.CC.A.3). The lesson on Model and Draw Addition Problems requires students to count the number of items and put together the number of individual objects. This connects the two major clusters of count to tell the number of objects and understand addition as putting together and adding to.	
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 conceptual discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts using a variety of manipulatives (e.g., when students are asked to make 10, blocks are used to show the connection) (K.OA.A.3). The materials develop conceptual understanding of key mathematical concepts and amply feature high-quality conceptual problems and conceptual discussion questions. Throughout the text, there is an emphasis placed on modeling (e.g., see in Chapter 3 that there are multiple hands-on lessons where students use two-color counters and modeling to demonstrate their understanding of both counting and modeling) (K.CC.B.4).	
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. 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 attend to procedural skill and fluency. Students are given multiple times to practice material through various worksheets and games. The design of the materials allows students to attain the fluencies and procedural skills required by the Standards. Each lesson begins with a Fluency Builder exercise and within each lesson there are ample procedural skill practice problems. In Lesson 5.8 there are multiple practice problems to help students develop fluency with writing and creating number pairs for 5. (K.OA.A.5) Each lesson also has a spiral review that requires students to count or do a skill that was in an earlier chapter or lesson.	

[5] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[6] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	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, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Application problems particularly stress applying the Major Work of the grade.	**Yes**	Most problems are framed in a real-world concrete setting. This provides young students with the opportunity to see a connection and apply learned concepts to everyday. Lesson 3.9 is devoted to problem solving for numbers to 9 with a connect to adding a specific number onto a given amount (K.OA.2). In another example, Lesson 10.8 uses pictures of real-world environments to demonstrate "above and below" for (K.G.A.1).	
	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 treated according to the standards for kindergarten. Places that indicate conceptual understanding, procedural skill and fluency, and application in the standards are addressed as such in the text. Lesson 5.1 through 5.3 uses all three aspects of rigor to address K.OA.A.1 and K.OA.A.2 to add within 10.	
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.[7] ☒ Yes ☐ No	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition. Each mathematical practice instructs the teacher on how to incorporate the mathematical practices into the lesson (e.g., teacher instructions in Chapter 1 Lesson 1 states, "MP4 Model with mathematics. Have children use counters to show that two is one more than one. Ask them to tell why counters are a good way to model this idea"). The mathematical practices used are listed at the top of student pages as well (e.g., see Lesson 3.9 where students are encouraged to make sense of problems and persevere in solving them as they examine the numbers of flags on top of a tent.	
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY				

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
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.[8]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[9]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.[11]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
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.[10] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard.[11] There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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). Materials engage students in problem solving as	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[8] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[9] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[10] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[11] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

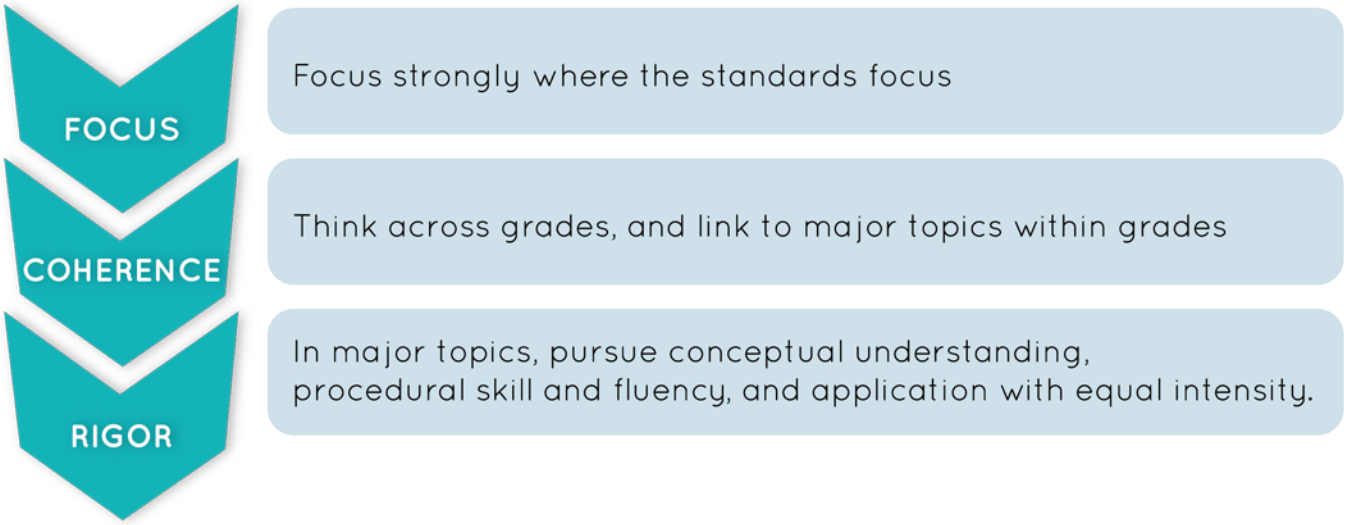
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	a form of argument, attending thoroughly to places in the standards that explicitly set expectations for multi-step problems. [12]			
	6c) Materials explicitly attend to the specialized language of mathematics.[12]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
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. [13] ☐ 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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7f) There is variety in the pacing and grain size of content coverage.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[12] Refer also to criterion #10 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[13] Refer also to pages 18-20 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL EVALUATION ***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.				
Compile the results for Sections I and II to make a final decision for the material under review.				
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**	
I: Non-Negotiables	1. Focus on Major Work	**No**	The materials only devote about 68% of content to the focus of major work on kindergarten major clusters.	See HMH comments on page 3.
	2. Consistent, Coherent Content	**Yes**	The materials develop conceptual understanding of key concepts by offering Learning Progressions and Content Standards that list the Common Core Learning Progressions across the grades. Materials connect major content to supporting content in meaningful ways. Materials also connect clusters in a domain.	
	3. Rigor and Balance	**Yes**	The lessons provide different tier levels of practice as well as extension activities. Materials have conceptual understanding, practice with procedural skills and fluency, and application throughout the units.	
	4. Focus and Coherence via Practice Standards	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition.	
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	6. Alignment Criteria for Standards for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7. Indicators of Quality	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL DECISION FOR THIS MATERIAL: **Tier III, Not representing quality**				

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **1**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
2. Consistent, Coherent Content (Non-Negotiable)	1. Focus on Major Work (Non-Negotiable)
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.				
Non-Negotiable 1. FOCUS ON MAJOR WORK[14]: Students and teachers using the materials as designed devote the large majority[15] of time in each grade K–8 to the major work of the grade. ☐ Yes ☒ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade. Each grade must meet the criterion; do not average across two or more grades.	**No**	Materials do not devote the large majority of class time to the major work of the grade. Students spend a disproportionate amount of time on supporting and additional clusters. The book contains 12 Chapters with 101 Lessons total. Eight Chapters (70 Lessons) are entirely devoted to the major work of 1st grade with another 5 Lessons from another Chapter to make a total of 75 Lessons devoted to the major work of 1st grade. The remaining 26 Lessons are devoted to supporting and/or additional clusters. Only 74% of the Lessons focus on the major work of 1st grade when this percentage should be closer to 85%.	Many of the lesssons that focus on the major work are intended to be covered over 2 days, as indicated in the suggested pacing charts in the Teacher Edition and Planning Guide. When viewed over the course of a full year's worth of instructional time and not just as a collection of 101 lessons, a typical Grade 1 classroom using Go Math spends close to 85% of the instructional time on major work. HMH has worked with many districts to develop customized pacing guides based on district goals and the number of teaching days available. See, for example, the sample Grade 1 pacing guide provided as an attachment, which accounts for 140 instructional days and 81% of the time spent on major work.
	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.[16]	**Yes**	Minimal time is spent on content outside of 1st grade, and no assessment items hold students responsible for content above that of 1st grade. It should be noted that 1.G.A.1 is not adequately assessed on either the Chapter 11 or Chapter 12 Test. Students are never asked to distinguish between defining and nondefining attributes as is the explicit expectation of the Standard.	
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.[17]	**Yes**	Materials connect supporting content to major content in meaningful ways. Many of the clusters are presented in isolation within a chapter. However, an effort is made to connect the content when appropriate (e.g., see Chapter 10, lesson 1 where students use data to solve problems (1.MD.C.4). Students must interpret data and must represent and solve addition problems in the data (1.OA.A.1)).	

[14] For more on the major work of the grade, see Focus by Grade Level.
[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%.
[16] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[17] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	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. [18]	**Yes**	Materials include problems and activities that serve to connect two or more clusters in a domain. However, it should be noted that none of the domains are combined in any of the chapters. Lesson 6.8, Show Numbers in Different Ways connects major content in meaningful ways. Students use base 10 blocks to represent numbers (1.NBT.B.2). Students can use different representations of the numbers, so they are using place value as well as adding (1.NBT.C.4). (e.g., see connections in Chapter 3 among 1.OA.A.2, 1.OA.B.3, 1.OA.C5, and 1.OA.C6.)	
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.[19] ☒ 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 conceptual discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts using a variety of manipulatives (e.g., students are asked to represent place value using models). The materials develop conceptual understanding of key mathematical concepts and amply feature high-quality conceptual problems and conceptual discussion questions. Throughout the text, there is an emphasis placed on modeling (e.g., see Chapter 6 where there are multiple hands-on lessons where students use connecting cubes and modeling to demonstrate their understanding of counting and modeling). In Lesson 6.4, students use snap cubes to make tens and ones when counting (1.NBT.B.2). They are also to draw representations of numbers using tens and ones, developing conceptual understanding of counting using tens.	

[18] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[19] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. 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 attend to procedural skill and fluency. Students are given multiple times to practice material through various worksheets and games. The design of the materials allows students to attain the fluencies and procedural skills required by the Standards. Each lesson begins with a Fluency Builder exercise and within each lesson there are ample procedural skill practice problems (e.g., see Lesson 8.10 where there are many skill practice problems to help students develop fluency with addition and subtraction (1.NBT.C.4 and 1.NBT.C.6)).	
	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, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Application problems particularly stress applying the Major Work of the grade.	**Yes**	Most problems are framed in a real-world concrete setting. This provides young students with the opportunity to see a connection and apply learned concepts to everyday (e.g., see Chapters 1 and 2, where students model with word problems using concrete objects or pictures (pg. 123) to solve addition and subtraction problems for 1.OA.A.1.)	
	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 treated according to the standards for 1st Grade. Places that indicate conceptual understanding, procedural skill and fluency, and application in the standards are addressed as such in the text. For example, Lesson 9.3 through 9.5 use all three aspects of rigor to address 1.MD.A.2 to measure objects.	
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.[20]	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition. Each mathematical practice instructs the teacher how to incorporate the mathematical practices into the lesson (e.g., teacher instructions in Chapter 8 Lesson 7 states, "MP1 Make sense of problems and persevere in solving them. Use Math Talk to focus on children's	

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
☒ Yes ☐ No			understanding of adding tens to tens and ones to ones when adding two-digit numbers.”). The mathematical practices used are listed at the top of student pages as well. (e.g., see Lesson 1.2 where students are encouraged to use appropriate tools strategically by using connecting cubes to model a given scenario).	
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. [21]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[22]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. [11]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful	**REQUIRED** **6a)** Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.[23] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[21] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[22] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[23] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

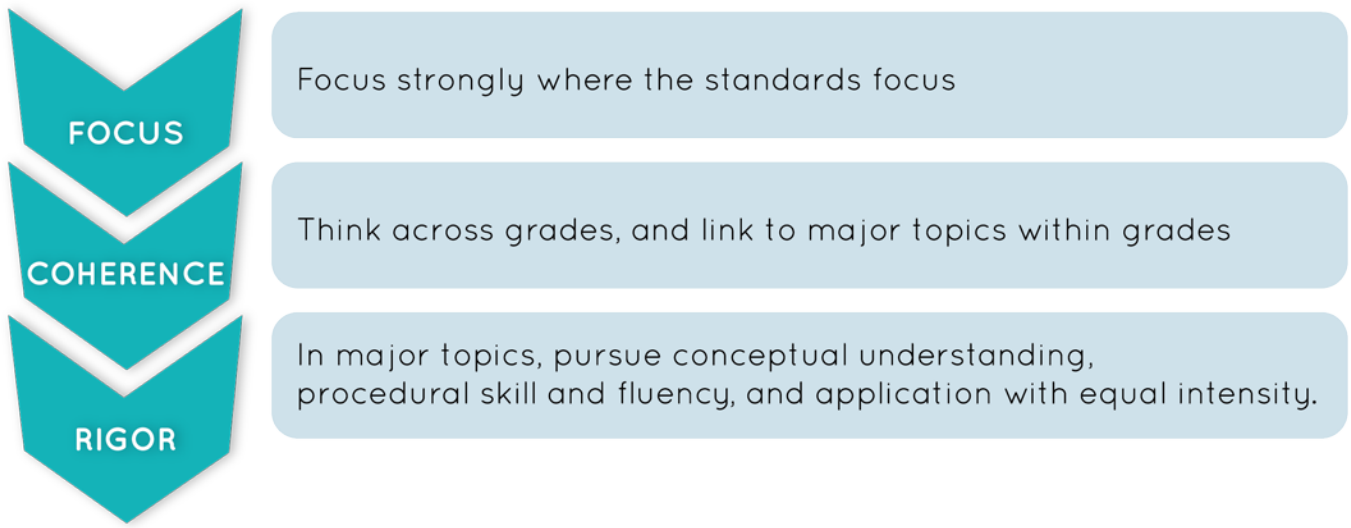
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
and purposeful connections that enhance the focus and coherence of the standards rather than detract from the focus and include additional content/skills to teach which are not included in the standards. ☐ Yes ☐ No	problems that stimulate students to develop the habits of mind described in the practice standard.[24] There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.			
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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). 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. [25]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	6c) Materials explicitly attend to the specialized language of mathematics.[12]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.were not met.	
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. [26] ☐ 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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[24] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[25] Refer also to criterion #10 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[26] Refer also to pages 18-20 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.			
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7f) There is variety in the pacing and grain size of content coverage.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL EVALUATION ***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.				
Compile the results for Sections I and II to make a final decision for the material under review.				
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**	
I: Non-Negotiables	1. Focus on Major Work	**No**	Materials do not devote the larger majority of class time to the major work of the grade (74%), however no material outside the scope of 1st grade is present on assessments.	See HMH comments on page 11.
	2. Consistent, Coherent Content	**Yes**	The materials develop conceptual understanding of key concepts by offering Learning Progressions and Content Standards that list the Common Core Learning Progressions across the grades. Materials connect supporting content to major content in meaningful ways. Materials include problems and activities that serve to connect two or more clusters in a domain.	

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	3. Rigor and Balance	**Yes**	The lessons provide different tier levels of practice as well as extension activities. Materials have conceptual understanding, practice with procedural skills and fluency, and application throughout the units.	
	4. Focus and Coherence via Practice Standards	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition.	
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	6. Alignment Criteria for Standards for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7. Indicators of Quality	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL DECISION FOR THIS MATERIAL: **Tier III, Not representing quality**				

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **2**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
2. Consistent, Coherent Content (Non-Negotiable)	1. Focus on Major Work (Non-Negotiable)
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.				
Non-Negotiable 1. FOCUS ON MAJOR WORK[27]: Students and teachers using the materials as designed devote the large majority[28] of time in each grade K–8 to the major work of the grade. ☐ Yes ☒ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade. Each grade must meet the criterion; do not average across two or more grades.	**No**	Materials do not devote the large majority of class time to the major work of the grade. Students spend a disproportionate amount of time on supporting and additional clusters. The book contains 11 Chapters with 109 Lessons total. 76 Lessons are devoted to the major work of 2nd grade while the remaining 33 Lessons are devoted to supporting and/or additional clusters. Only 70% of the Lessons focus on the major work of 2nd grade when this percentage should be closer to 85%.	Many of the lesssons that focus on the major work are intended to be covered over 2 days, as indicated in the suggested pacing charts in the Teacher Edition and Planning Guide. When viewed over the course of a full year's worth of instructional time and not just as a collection of 109 lessons, a typical Grade 2 classroom using Go Math spends close to 85% of the instructional time on major work. HMH has worked with many districts to develop customized pacing guides based on district goals and the number of teaching days available. We would be happy to do the same for Louisiana districts.
	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.[29]	**No**	2.NBT.B.5 and 2.NBT.B.7 expects students to find sums and differences of whole numbers using strategies that are grounded in conceptual understanding or acquired fluency, not procedural skill and algorithms; however, in Chapters 5 and 6, the book directs students to the standard algorithm for adding and subtracting multi-digit whole numbers. This particular standard algorithm is not introduced in the Standards until 4th grade (see 4.NBT.B.4). Furthermore, problems #8, 9, and 14 on the Chapter 5 Test, as well as, problem #10 on the Chapter 6 Test expect students to calculate sums and differences using the standard algorithm.	The Common Core Standards do not state that the standard algorithm for subtraction should not be introduced prior to Grade 4. The Standards do say that students must be fluent using the standard algorithm by Grade 4. The strategies used in Chapters 5 and 6 are the foundations that students need in order to begin building the fluency that they are expected to attain by Grade 4. The majority of items in Chapters 5 and 6 use strategies that are grounded in conceptual understanding and acquired fluency. The models and drawings for subtraction problems used in Go Math are introduced well before students see problems that resemble the standard algorithm for subtraction.
Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course's instructional materials are coherent and consistent with the content in the standards.	**REQUIRED** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.[30]	**Yes**	Materials connect supporting content to major content in meaningful ways. Many of the clusters are presented in isolation within a chapter. However, an effort is made to connect the content when appropriate (e.g., Chapter 5 combines content from 2.NBT and 2.OA; and in Chapter 1, spirals among standards 2.OA.C.3, 2.NBT.A.2, and	

[27] For more on the major work of the grade, see Focus by Grade Level.
[28] 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%.
[29] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[30] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
☒ Yes ☐ No			2.NBT.A.3).	
	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. [31]	**Yes**	Materials include problems and activities that serve to connect two or more clusters in a domain (e.g., see Lesson 9.4 where students are measuring (2.MD.A.2), representing, and solving problems using both addition and subtraction (2.MD.B.5). This example represents a connection between two major clusters).	
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.[32] ☒ 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 conceptual discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts using a variety of manipulatives (e.g., students are asked to represent place value using models for all problems and conceptual discussion questions). In Lesson 2.3 students use base-ten blocks to represent a number and draw to show what they did (2.NBT.A.1). In Lesson 4.6 conceptual understanding is develop by breaking numbers apart in order to add 2 digit numbers together (2.NBT.B.9). This helps develop important conceptual understanding for students.	
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	The design of the materials allows students to attain the fluencies and procedural skills required by the Standards. Each lesson begins with a Fluency Builder exercise and within each lesson there are ample procedural skill practice problems (e.g., see Lesson 5.6 where there are many skill practice problems to help students develop fluency with 2-digit subtraction and Lesson 4.7 which provides students with fluency practice and skill of adding 2-two digit numbers together; 2.NBT.B.5).	
	REQUIRED **3c)** ***Attention to Applications:*** Materials are designed so that teachers and students spend sufficient time working with engaging	**Yes**	Students and teachers spend sufficient time working with engaging applications without losing focus on the major work of the grade (e.g., see Lesson 7.7	

[31] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[32] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	applications, without losing focus on the major work of each grade including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Application problems particularly stress applying the Major Work of the grade.		devoted to problem solving with money; 2.MD.C.8).	
	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 treated according to the standards for 2nd Grade. Places that indicate conceptual understanding, procedural skill and fluency, and application in the standards are addressed as such in the text. For example, Chapter 10 uses all three aspects of rigor to address 2.MD.D.10 as students read and make picture and bar graphs.	
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.[33] ☒ Yes ☐ No	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition. Each mathematical practice instructs the teacher how to incorporate the mathematical practices into the lesson (e.g., teacher instructions in Chapter 4 Lesson 6 states, "MP8 Look for and express regularity in repeated reasoning. To extend the children's thinking," it states, "write these problems on the board, then ask children to find and correct the error in each."). The mathematical practices used are listed at the top of student pages as well (e.g., see Lesson 9.5 where students must attend to precision when using measurement tools to find the measure of objects in the classroom in centimeters and meters). In the student edition, there are places where the mathematical practices are said to be used and most of the times, they strengthen the work. However, sometimes it isn't enhancing the specific Standard (e.g., see page 479 where students are asked to describe the value of the 3 coins and compare. While this is an activity that could be beneficial, it is	

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
			not necessarily a correctly labeled mathematical practice in the student edition).	
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. [34]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[35]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. [11]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
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	**REQUIRED** **6a)** Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.[36] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard.[37] There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[34] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[35] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[36] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[37] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

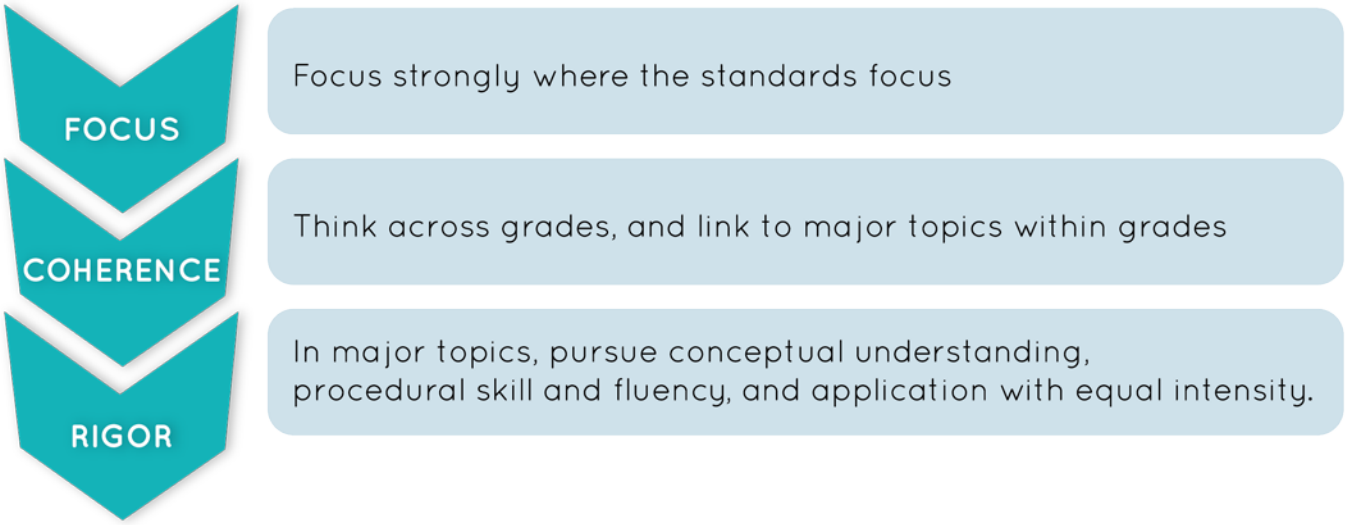
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
included in the standards. ☐ Yes ☐ No	**REQUIRED** **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: Materials provide sufficient opportunities for students 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). 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. [38]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	6c) Materials explicitly attend to the specialized language of mathematics.[12]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met..	
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. [39] ☐ 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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[38] Refer also to criterion #10 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[39] Refer also to pages 18-20 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	posed is carefully considered.			
	7f) There is variety in the pacing and grain size of content coverage.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL EVALUATION ***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.				
Compile the results for Sections I and II to make a final decision for the material under review.				
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**	
I: Non-Negotiables	1. Focus on Major Work	**No**	Materials spend too much time outside of grade level (70%), however students are also introduced to the standard algorithm for addition and subtraction which is outside the scope of content for 2nd grade.	See HMH comments on page 19.
	2. Consistent, Coherent Content	**Yes**	The materials develop conceptual understanding of key concepts by offering Learning Progressions and Content Standards that list the Common Core Learning Progressions across the grades. Materials connect supporting content to major content in meaningful ways. Materials include problems and activities that serve to connect two or more clusters in a domain.	
	3. Rigor and Balance	**Yes**	The lessons provide different tier levels of practice as well as extension activities. Materials provide conceptual understanding, practice with procedural skills and fluency, and application throughout the units.	

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	4. Focus and Coherence via Practice Standards	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition.	
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	6. Alignment Criteria for Standards for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7. Indicators of Quality	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL DECISION FOR THIS MATERIAL: **Tier III, Not representing quality**				

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **3**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
3. Rigor and Balance (Non-Negotiable)	1. Focus on Major Work (Non-Negotiable)
4. Focus Coh. via Practice Std (Non-Negotiable)	2. Consistent, Coherent Content (Non-Negotiable)

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.				
Non-Negotiable 1. FOCUS ON MAJOR WORK[40]: Students and teachers using the materials as designed devote the large majority[41] of time in each grade K–8 to the major work of the grade. ☐ Yes ☒ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade. Each grade must meet the criterion; do not average across two or more grades.	**No**	Materials do not devote the large majority of class time to the major work of the grade. Students spend a disproportionate amount of time on supporting and additional clusters. The book contains 12 Chapters with 105 Lessons total. 70 Lessons are devoted to the major work of 3rd grade while the remaining 35 Lessons are devoted to supporting and/or additional clusters. Only 67% of the Lessons focus on the major work of 3rd grade when this percentage should be closer to 75 or 80%.	Many of the lesssons that focus on the major work are intended to be covered over 2 days, as indicated in the suggested pacing charts in the Teacher Edition and Planning Guide. When viewed over the course of a full year's worth of instructional time and not just as a collection of 105 lessons, a typical Grade 3 classroom using Go Math spends close to 75 or 80% of the instructional time on major work. HMH has worked with many districts to develop customized pacing guides based on district goals and the number of teaching days available. We would be happy to do the same for Louisiana districts.
	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.[42]	**No**	3.NF.A.3d explicitly calls for comparison of fractions with either the same numerator or same denominator; however, problems #4, 5, 15, and 19 on the Chapter 9 Test expect students to compare fractions with unlike numerators and denominators by examining the "missing piece." Albeit a good strategy, it is not aligned to the expectation of 3rd grade, and problems with this expectation are reserved for 4th grade (see 4.NF.A.2).	Students compare fractions in Lesson 9.4. This lesson is the culmination of the concept of understanding the size of the parts of the whole to compare fractions. As an aspect of understanding the nature of the size of a part, students start this lesson by looking at the missing parts of two fractions with unlike denominators. The intent is to reinforce the seminal aspect of understanding fractions found in 3.NF.A.1 (the nature of the size of b equal parts). Central to this grounding in the concept is to build visualization skills, through manipulatives and pictorial representations, to compare the fractions. It is expected that students use these grade-level-appropriate strategies. The result is a deeper understanding of fraction concepts and the capacity on the part of the student to compare any two fractions, based on the size of the part of the whole. Through these skills, students are then prepared for finding equivalent fractions in Lesson 9.7. In order to do so, students need to explore the concept of comparing models with different denominators that have the same areas

[40] For more on the major work of the grade, see Focus by Grade Level.
[41] 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%.
[42] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
				shaded (as is found in lesson 9.4). They learn that the number of equal parts can change as long as the total area remains the same. Thus, in the Chapter 9 Test, students apply the foundation learned through modeling and applied strategies to the concept of equivalence.
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.[43]	**No**	Materials do not connect supporting content to major content in meaningful ways. Many of the clusters are presented in isolation within a chapter. Lesson 2.6 attempted to connect 3.OA.D.8 to 3.MD.B.3, however students are not creating the scaled bar graphs or picture graphs. In this lesson students are solving two-step problems based on given graphs.	In Lessons 2.1–2.5, students have many opportunities to create bar graphs and picture graphs. The focus of Lesson 2.6 (Solve Problems Using Data) is on interpreting data provided in a bar graph. We believe Chapter 2 clearly makes the connection between 3.MD.B (represent and interpret data) and 3.OA.D (solve problems involving the four operations…).
	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.[44]	**No**	The 3rd grade curriculum addresses topics in isolation. Multiplication and division are treated separately (i.e., as separate chapters). Connections between major clusters should be more defined. For example, Lesson 2.3 and 2.5, students are directed to make a scaled picture graph or bar graph (3.MD.B.8) and solve addition and subtraction problems related to the graphs (3.NBT.A.2)).	We believe the focus and coherence in Go Math Grade 3 is appropriate for a third grade student. Chapter 6 Lessons 7 and 8 explain the connections between multiplication and division. We believe that calling out other natural connections found in Go Math, such as addition and subtraction problems related to bar graphs, should be left to the discretion of the teacher, so as to not confuse or overwhelm students. Support for doing so is in the Go Math Teacher Edition.
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.[45]	**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 conceptual discussion questions.	**Yes**	The materials develop conceptual understanding of key mathematical concepts and amply feature high-quality conceptual problems and conceptual discussion questions (e.g., Lesson 3.2 where students reason about connections between multiplication and addition using drawing and models (3.OA.A.1). Chapter 3, as a whole, is devoted to developing conceptual understanding of multiplication. Real world models and counters are used in order to make sense of multiplication).	

[43] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[44] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[45] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
☒ Yes ☐ No	**REQUIRED** **3b) *Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	The design of the materials allows students to attain the fluencies and procedural skills required by the Standards. Each lesson begins with a Fluency Builder exercise and within each lesson there are ample procedural skill practice problems (e.g., in Lesson 4.5, 4.8, and 5.9 students use a variety of strategies to fluently multiply and divide within 100 for 3.OA.C.7).	
	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, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Application problems particularly stress applying the Major Work of the grade.	**Yes**	Most problems are framed in a real-world concrete setting. This provides young students with the opportunity to see a connection and apply learned concepts to everyday. Students and teachers spend sufficient time working with engaging applications without losing focus on the major work of the grade In Lesson 4.2 students solve multiplication problems using word problems for 3.OA.A.3.	
	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 treated according to the standards for 3rd Grade. Places that indicate conceptual understanding, procedural skill and fluency, and application in the standards are addressed as such in the text. Lesson 11.6 through 11.8 use all three aspects of rigor to address 3.MD.C.7 as students relate area to multiplication and addition.	
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.[46]	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition. Each mathematical practice instructs the teacher how to incorporate the mathematical practices into the lesson (e.g., . see Chapter 7, Lesson 8, linked to MP2 "reason abstractly and quantitatively"). Exercise 22 requires students to formulate a word problem for a division fact (e.g., "Students can write a sharing or measurement division problem"). The	

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
☒ Yes ☐ No			mathematical practices used are also listed at the top of student pages (e.g., see Chapter 7, page 8, where students are asked to describe each of the three methods they used in order to find the area of a rectangle). In Lesson 9.6, students are encouraged to use appropriate tools strategically to model equivalent fractions with a paper folding activity.	
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.[47]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[48]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.[11]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful	**REQUIRED** **6a)** Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.[49] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[47] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[48] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[49] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

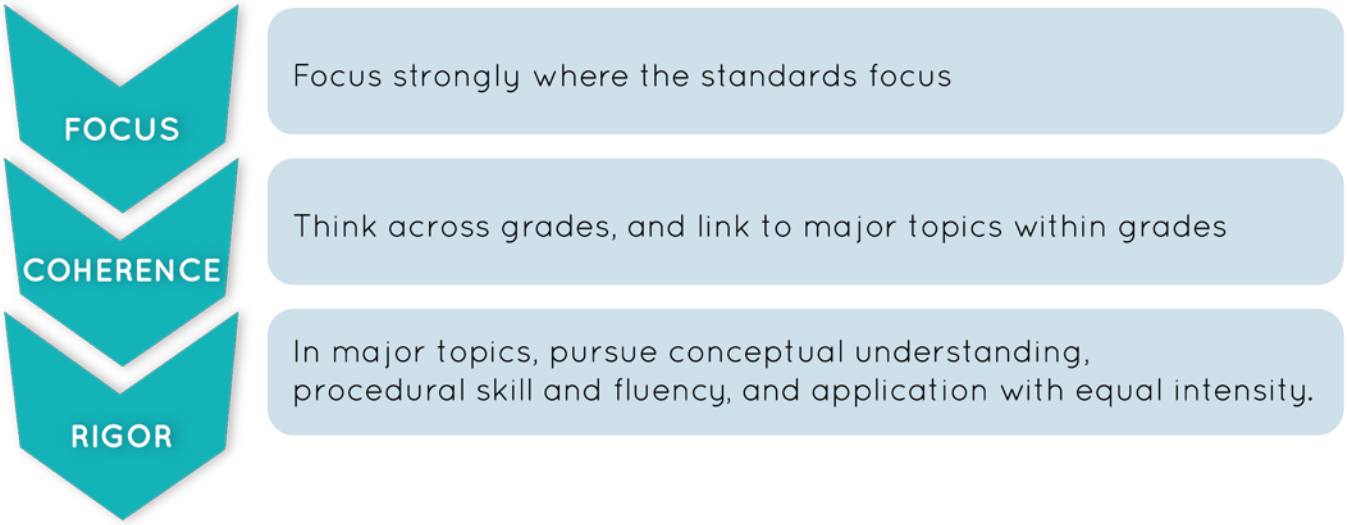
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
and purposeful connections that enhance the focus and coherence of the standards rather than detract from the focus and include additional content/skills to teach which are not included in the standards. ☐ Yes ☐ No	problems that stimulate students to develop the habits of mind described in the practice standard.[50] There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.			
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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). 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. [51]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	6c) Materials explicitly attend to the specialized language of mathematics.[12]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
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. [52] ☐ 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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[50] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[51] Refer also to criterion #10 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[52] Refer also to pages 18-20 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.			
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7f) There is variety in the pacing and grain size of content coverage.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL EVALUATION ***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.				
Compile the results for Sections I and II to make a final decision for the material under review.				
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**	
I: Non-Negotiables	1. Focus on Major Work	**No**	67% of the major work is supported by the text, while Chapter 9 test has students compare fractions with unlike denominators which is not introduced in the 3rd grade standards.	See HMH comments on pages 27 and 28.
	2. Consistent, Coherent Content	**No**	Supporting work does not support the major work of the grade. Multiplication and division are treated separately, as separate chapters. Connections between major clusters should be more defined.	See HMH comments on page 28.
	3. Rigor and Balance	**Yes**	The lessons provide different tier levels of practice as well as extension activities. Materials have conceptual understanding, practice with procedural skills and fluency, and application throughout the units.	

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	4. Focus and Coherence via Practice Standards	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition.	
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	6. Alignment Criteria for Standards for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7. Indicators of Quality	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL DECISION FOR THIS MATERIAL: **Tier III, Not representing quality**				

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **4**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
3. Rigor and Balance (Non-Negotiable)	1. Focus on Major Work (Non-Negotiable)
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.				
Non-Negotiable 1. FOCUS ON MAJOR WORK[53]: Students and teachers using the materials as designed devote the large majority[54] of time in each grade K–8 to the major work of the grade. ☐ Yes ☒ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade. Each grade must meet the criterion; do not average across two or more grades.	**No**	Materials do not devote the large majority of class time to the major work of the grade. Students spend a disproportionate amount of time on supporting and additional clusters. The book contains 13 Chapters with 103 Lessons total. 68 Lessons are devoted to the major work of 4th grade while the remaining 35 Lessons are devoted to supporting and/or additional clusters. Only 66% of the Lessons focus on the major work of 4th grade when this percentage should be closer to 70 or 75%.	Many of the lesssons that focus on the major work are intended to be covered over 2 days, as indicated in the suggested pacing charts in the Teacher Edition and Planning Guide. When viewed over the course of a full year's worth of instructional time and not just as a collection of 103 lessons, a typical Grade 4 classroom using Go Math spends close to 75% of the instructional time on major work. HMH has worked with many districts to develop customized pacing guides based on district goals and the number of teaching days available. We would be happy to do the same for Louisiana districts.
	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.[55]	**Yes**	Although a diagnostic test is available under the teacher resources, no assessments make teachers or students responsible for any topics before the grade in which they are introduced in the standards. Minimal time is spent on content outside of 4th grade, and no assessment items hold students responsible for content above that of 4th grade. It should be noted that problem #5 on the Chapter 12 Test uses unit fractions other than the unit fractions explicitly called for by the standard, 4.MD.B.4. Also, it should be noted that all assessment items for 4.NBT.A.1 on Chapter 1 Test do not assess the Standard, rather they assess foundational skills necessary for mastery of 4.NBT.A.1. Similarly, the assessment items for 4.OA.C.5 on the Chapter 10 Test do not align to the expectation of the Standard as they expect students to find a missing term in a given number or shape pattern without being provided the rule of the pattern.	

[53] For more on the major work of the grade, see Focus by Grade Level.
[54] 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%.
[55] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
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.[56]	**Yes**	Materials connect supporting content to major content in meaningful ways. Many of the clusters are presented in isolation within a chapter. However, an effort is made to connect the content when appropriate (e.g., Lesson 5.3 connects factors (4.OA.B.4) to multiplication (4.NBT.B.5) using word problems.)	
	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. [57]	**Yes**	Materials include problems and activities that serve to connect two or more clusters in a domain. For example, Lesson 7.3 "Add Fractions Using Models" connects two 4th grade domains: "Measurement and Data" and "Number and Operations - Fractions".	
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.[58] ☒ 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 conceptual discussion questions.	**Yes**	The materials develop conceptual understanding of key mathematical concepts and amply feature high-quality conceptual problems and conceptual discussion questions. For example, in Lesson 9.1 students relate tenths and decimals using area models, tables, and numbers lines (4.NF.C.6) Also, students add and subtract fractions using fraction strips and circles in 7.1 for 4.NF.B.3a.	
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	The design of the materials allows students to attain the fluencies and procedural skills required by the Standards. Students are given multiple opportunities to practice material through various worksheets and games. Each lesson begins with a Fluency Builder exercise and within each lesson there are ample procedural skill practice problems (e.g., see Lesson 1.6 and 1.7 where students add and subtract multi-digit whole numbers for 4.NBT.B.4.)	

[56] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[57] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[58] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	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, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Application problems particularly stress applying the Major Work of the grade.	**Yes**	Most problems are framed in a real-world concrete setting. This provides young students with the opportunity to see a connection and apply learned concepts to everyday. Students and teachers spend sufficient time working with engaging applications without losing focus on the major work of the grade (e.g., see Lesson 8.4 where students complete a series of problems on multiplying a fraction or mixed number by a whole number using information gathered from a recipe for sidewalk chalk (4.NF.B.4c)).	
	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 treated according to the standards for 4th Grade. Places that indicate conceptual understanding, procedural skill and fluency, and application in the standards are addressed as such in the text. For example Lessons 11.4 and 11.5, use 4.MD.C.7 and all three aspects of rigor to add and subtract angle amounts.	
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.[59] ☒ Yes ☐ No	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition. Each mathematical practice instructs the teacher how to incorporate the Mathematical Practices into the lesson (e.g., see teacher instructions in Chapter 7, Lesson 5 which states, "MP6 Attend to precision. Have students read Exercise 15. Students may want to first identify the operation and method they are going to use to find the answer. Discuss with students which method they prefer and why.") In addition, the mathematical practices used are listed at the top of student pages (e.g., see Lesson 3.5 where students are asked to construct a viable argument and	

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
			critique the reasoning of others comparing two students' strategies for multiplying whole numbers).	
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. [60]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[61]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. [11]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that	**REQUIRED** **6a)** Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.[62] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard.[63] There are teacher-directed	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[60] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[61] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[62] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[63] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

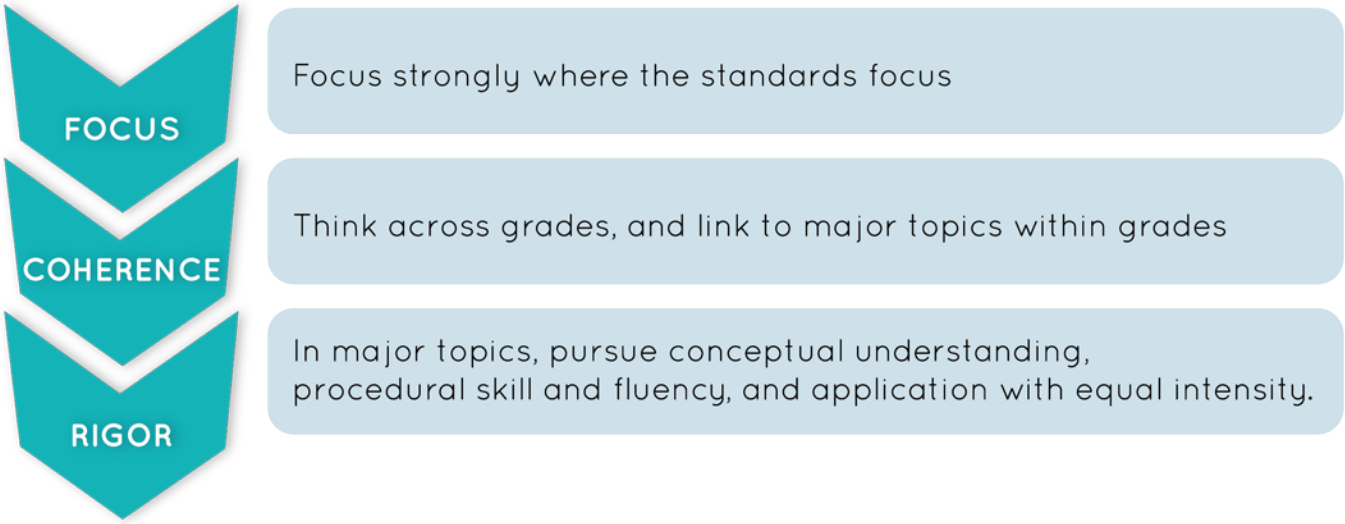
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
enhance the focus and coherence of the standards rather than detract from the focus and include additional content/skills to teach which are not included in the standards. ☐ Yes ☐ No	materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.			
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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). 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. [64]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	6c) Materials explicitly attend to the specialized language of mathematics.[12]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met..	
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. [65] ☐ 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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[64] Refer also to criterion #10 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[65] Refer also to pages 18-20 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	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.			
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7f) There is variety in the pacing and grain size of content coverage.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL EVALUATION ***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.				
Compile the results for Sections I and II to make a final decision for the material under review.				
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**	
I: Non-Negotiables	1. Focus on Major Work	**No**	Only 66% of time is spent on the major work of 4th grade. Assessments do not contain material beyond the scope of 4th grade.	See HMH comments on page 35.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so focus and coherence are enhanced throughout the year.	
	3. Rigor and Balance	**Yes**	Materials contain a balance of rigor. Conceptual understanding, procedural skills and fluency, and	

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
			application are addressed appropriately as needed by the standards addressed in the 4th grade.	
	4. Focus and Coherence via Practice Standards	**Yes**	The practice standards are connected to the content in a way that promotes focus and coherence.	
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	6. Alignment Criteria for Standards for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7. Indicators of Quality	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL DECISION FOR THIS MATERIAL: Tier III, Not representing quality				

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **5**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
2. Consistent, Coherent Content (Non-Negotiable)	1. Focus on Major Work (Non-Negotiable)
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.				
Non-Negotiable 1. FOCUS ON MAJOR WORK[66]: Students and teachers using the materials as designed devote the large majority[67] of time in each grade K–8 to the major work of the grade. ☐ Yes ☒ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade. Each grade must meet the criterion; do not average across two or more grades.	**Yes**	Materials do spend a majority of time on the major work of 5th grade. The book contains 11 Chapters with a total of 99 Lessons. Of the total 99 Lessons, 78 Lessons are devoted to the major work of 5th grade making approximately 79% of this book devoted to major work.	
	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.[68]	**No**	Although a diagnostic test is available under the teacher resources, assessments make teachers or students responsible for topics before the grade in which they are introduced in the standards. 5.NBT.B.6 expects students to find quotients of whole numbers using strategies that are grounded in conceptual understanding, not procedural skill and algorithms; however, in Chapter 2 when division is introduced, the book directs students first to the standard algorithm. The standard algorithm for division is not introduced in the Standards until 6th grade (see 6.NS.B.2). Furthermore, problem #11 on the Chapter 2 Test expects students to divide using the standard algorithm and again in problem #11 on the Chapter 5 Test.	The Common Core Standards do not state that the standard algorithm for division should not be introduced prior to Grade 6. The Standards do say that students must be fluent using the standard algorithm by Grade 6. The strategies used in Grade 5 are the foundations that students need in order to begin building the fluency that they are expected to attain by 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.[69]	**Yes**	Materials connect supporting content to major content in meaningful ways. Chapter 10 addresses supporting standard 5.MD.A.1 where students are to convert amount different-standard measurement units within a given measurement system. Lessons 10.3 and 10.6 use 5.NF.B.6 and 5.NF.B.4 as well as 5.MD.A.1 to allow students to solve problems using conversion with fractions and whole numbers.	

[66] For more on the major work of the grade, see Focus by Grade Level.
[67] 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%.
[68] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[69] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	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. [70]	**Yes**	Materials include problems and activities that serve to connect two or more clusters in a domain. For example, in lesson 4.1 where students use multiplication patterns with decimals demonstrates the connection of two clusters under a domain (5.NBT.A.2 and 5.NBT.B.7).	
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.[71] ☒ 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 conceptual discussion questions.	**Yes**	The materials develop conceptual understanding of key mathematical concepts and amply feature high-quality conceptual problems and conceptual discussion questions (e.g., students multiply fractions using fraction bars). In Lesson 6.1, students complete an investigation activity with fraction strips and a Math Board to discover how to use models to add fractions with different denominators 5.NF.A.1 and 5.NF.A.2.	
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	The design of the materials allow students to attain the fluencies and procedural skills required by the Standards. Students are given multiple opportunities to practice material through various worksheets and games. Each lesson begins with a Fluency Builder exercise and within each lesson there are ample procedural skill practice problems (e.g., see Lessons 1.6 and 1.7 where there are skill practice problems to help students develop fluency with multiplying multi-digit whole numbers (5.NBT.B.5) .	
	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, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Application problems particularly stress applying the Major Work of the grade.	**Yes**	Most problems are framed in a real-world concrete setting. This provides young students with the opportunity to see a connection and apply learned concepts to everyday (e.g., see Lesson 10.4 where students complete multi-step measurement problems with scenarios such as points scored in a soccer game or the weight of animals at a zoo(5.MD.A.1)).	

[70] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[71] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	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 treated according to the standards for 5th Grade. Places that indicate conceptual understanding, procedural skill and fluency, and application in the standards are addressed as such in the text. For example, Lesson 11.4 uses the three aspects of rigor to discuss volume for 5.MD.C.5.	
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.[72] ☒ Yes ☐ No	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition. Each mathematical practice instructs the teacher how to incorporate the Mathematical Practices into the lesson (e.g., teacher instructions in Chapter 7, Lesson 3 state, "MP4 Model with mathematics. How else could we draw a model to show this problem?") In addition, the mathematical practices used are listed at the top of student pages (e.g., see Lesson 1.1 where students are asked to look for and make use of structure by using base-10 blocks to understand the relationships among place-value positions).	
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.	**REQUIRED** **5a)** Materials base content progressions on the grade-by-grade progressions in the Standards.[73]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[72] Refer also to criterion #8 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013)
[73] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
☐ Yes ☐ No	the new knowledge.[10]			
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[74]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. [11]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
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.[75] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard.[76] There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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). 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. [77]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	6c) Materials explicitly attend to the specialized language of mathematics.[12]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
Additional Criterion 7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to	**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	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

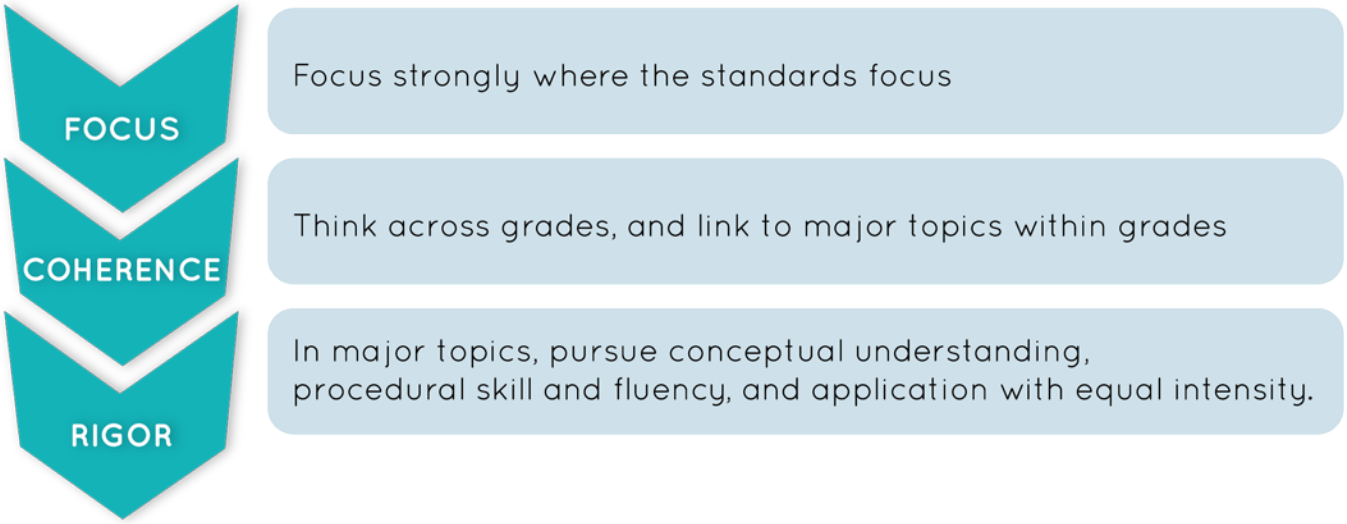
[74] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[75] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[76] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[77] 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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
give teachers and students the tools they need to meet the expectations of the Standards. [78] ☐ Yes ☐ No	mastery. Each problem or exercise has a purpose.			
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7f) There is variety in the pacing and grain size of content coverage.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[78] Refer also to pages 18-20 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
FINAL EVALUATION ***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.				
Compile the results for Sections I and II to make a final decision for the material under review.				
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**	
I: Non-Negotiables	1. Focus on Major Work	**No**	Minimal time is spent on outside content. The majority of student and teacher work is spent completing material appropriate for the 5th grade. However, content beyond the scope of 5th grade is present on assessments.	See HMH comments on page 50.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so focus and coherence are enhanced throughout the year.	
	3. Rigor and Balance	**Yes**	Materials contain a balance of rigor. Conceptual understanding, procedural skills and fluency, and application are addressed appropriately as needed by the standards addressed in the 5th grade.	
	4. Focus and Coherence via Practice Standards	**Yes**	The practice standards are connected to the content in a way that promotes focus and coherence.	
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	6. Alignment Criteria for Standards for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7. Indicators of Quality	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL DECISION FOR THIS MATERIAL: **Tier III, Not representing quality**				

Strong mathematics instruction contains the following elements:



Title: **HMH GO Math** Grade: **6**

Publisher: **Houghton Mifflin Harcourt** Copyright: **2015**

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

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

STRONG	WEAK
2. Consistent, Coherent Content (Non-Negotiable)	1. Focus on Major Work (Non-Negotiable)
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.				
Non-Negotiable 1. FOCUS ON MAJOR WORK[79]: Students and teachers using the materials as designed devote the large majority[80] of time in each grade K–8 to the major work of the grade. ☐ Yes ☒ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade. Each grade must meet the criterion; do not average across two or more grades.	**No**	Materials do not devote the larger majority of class time to the major work of the grade. Students spend a disproportionate amount of time on supporting and additional standards. The book contains 13 Chapters with a total of 104 Lessons. Of the 13 Chapters, 5 Chapters (41 Lessons) and an additional 2 Lessons from another Chapter are devoted entirely to either supporting or additional clusters for 6th grade. The remaining 8 chapters (61 lessons) are devoted to major clusters. Approximately 59% of the Lessons are spent on content aligned to the major work of the grade.	Many of the lesssons that focus on the major work are intended to be covered over 2 days, as indicated in the suggested pacing charts in the Teacher Edition and Planning Guide. When viewed over the course of a full year's worth of instructional time and not just as a collection of 104 lessons, a typical Grade 6 classroom using Go Math spends close to 75% of the instructional time on major work. HMH has worked with many districts to develop customized pacing guides based on district goals and the number of teaching days available. We would be happy to do the same for Louisiana districts.
	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.[81]	**Yes**	Although a diagnostic test is available under the teacher resources, no assessments make teachers or students responsible for any topics before the grade in which they are introduced in the standards. There are a number of assessment items in the first few chapters that focus more on fifth grade standards. Minimal time is spent on content outside of 6th grade, and, of the content not aligned to 6th grade standards, none of it addresses content from higher grades or courses. The content outside of 6th grade comes from 4th and 5th grade as is the case in Chapter 2, Lessons 1-2 where students are ordering and comparing fractions and decimals. These Lessons have 6.NS.C.7 as the focus standard, but the Lessons do not include any negative numbers. The focus of 6.NS.C is extending students' understanding of the number line to include negative values. These Lessons merely review and slightly extend the work with fractions and decimals from 4th and 5th grade. Although students are not assessed on any topic that is beyond the scope of 6th grade, it should be	

[79] For more on the major work of the grade, see Focus by Grade Level.
[80] 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%.
[81] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
			noted that not all assessment items reflect on grade-level work as several items in the beginning Chapters are more appropriate for 4th and/or 5th grade than 6th grade (see problems 5 and 6 on Chapter 1 Test as an example).	
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.[82]	**Yes**	Materials connect supporting content to major content in meaningful ways. Many of the clusters are presented in isolation within a chapter. However, an effort is made to connect the content when appropriate. For example, Chapter 10 has numerous lessons that combine Geometry, which is a supporting content to Expressions and Equations, which is major content (6.GA.2 and 6.EE.B.6). Lesson 10.9 Figures on a Coordinate Plane uses 6.G.A.3 with 6.NS.C.6 and 6.NS.C.8.	
	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. [83]	**Yes**	Materials include problems and activities that serve to connect two or more clusters in a domain. Lesson 12.6, connects two domains in 6th grade (6.SP.B.5 and 6.NS.B.3) as students find measures of center while practicing fluency for using all four operations with multi-digit decimals.	
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.[84]	**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 conceptual discussion questions.	**Yes**	The materials develop conceptual understanding of key mathematical concepts and amply feature high-quality conceptual problems and conceptual discussion questions. Section 8.3 (6.EE.B.6 and 6.EE.B.7), students are investigating modeling equations. Students are using Algebra Tiles as a tool for conceptual understanding on solving equations.	
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills	**Yes**	The design of the materials allow students to attain the fluencies and procedural skills required by the Standards. Students are given multiple opportunities	

[82] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[83] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[84] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
☒ Yes ☐ No	required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.		to practice material through various worksheets and games. Each lesson begins with a Fluency Builder exercise (ex. pg. 681B for 6.NS.B.3) and within each lesson there are ample procedural skill practice problems. An example of this can be found in Lesson 1.6 through 1.9 where students use all four operations using multi-digit decimals (6.NS.B.3). There is sufficient procedural skill for students to master this skill in Lessons 1.6 through 1.9 and the fluency builders that follow.	
	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, including non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Application problems particularly stress applying the Major Work of the grade.	**Yes**	Most problems are framed in a real-world concrete setting. This provides young students with the opportunity to see a connection and apply learned concepts to everyday. Lesson 8.7 uses application to solve equations with fractions for 6.EE.B.7.	
	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 treated according to the standards for 6th Grade. Places that indicate conceptual understanding, procedural skill and fluency, and application in the standards are addressed as such in the text. For example, Lesson 10.9 addresses 6.G.A.3 using conceptual understanding, fluency, and application to draw polygons in the coordinate plane and find distances.	
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.[85]	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Major Work of the grade; practices strengthen the focus on Major Work instead of detracting from it, in both teacher and student materials.	**Yes**	A list of mathematical practices is included in the table of contents above each chapter and lesson. Mathematical practices are listed on the side of the text in the teacher's edition. Each mathematical practice instructs the teacher how to incorporate the Mathematical Practices into the lesson. For example, Chapter 6, Lesson 3 in the teacher edition has additional questions to ask demonstrating MP4	

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
☒ Yes ☐ No			and MP2. It gives the questions, the Mathematical Practices it is addressing, and possible answers. The Mathematical Practices used are listed at the top of student pages as well and have questions that are asked that specifically say which Mathematical Practice it is. The same lesson 6.3 has an example of this where students are required to explain.	
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.[86]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.[87]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.[11]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that	**REQUIRED** **6a)** Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.[88] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard.[89] There are teacher-directed	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[86] Refer also to criterion #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[87] Refer also to criterion #6 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[88] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[89] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
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	materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.			
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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). 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. [90]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	6c) Materials explicitly attend to the specialized language of mathematics.[12]	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
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. [91] ☐ 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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[90] Refer also to criterion #10 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[91] Refer also to pages 18-20 in the K – 8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7f) There is variety in the pacing and grain size of content coverage.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL EVALUATION ***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.				
Compile the results for Sections I and II to make a final decision for the material under review.				
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**	
I: Non-Negotiables	1. Focus on Major Work	**No**	59% of class time is spent on the major work of the grade, while assessments to do assess content beyond the scope of 6th grade.	See HMH comments in the discussion for Grade 6 Indicator 1a.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so focus and coherence are enhanced throughout the year.	
	3. Rigor and Balance	**Yes**	Materials contain a balance of rigor. Conceptual understanding, procedural skills and fluency, and application are addressed appropriately as needed by the standards addressed in the 6th grade.	
	4. Focus and Coherence via Practice Standards	**Yes**	The practice standards are connected to the content in a way that promotes focus and coherence.	

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES	PUBLISHER RESPONSE
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	6. Alignment Criteria for Standards for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7. Indicators of Quality	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL DECISION FOR THIS MATERIAL: **Tier III, Not representing quality**				

Appendix II.

Public Comments

There were no public comments submitted.