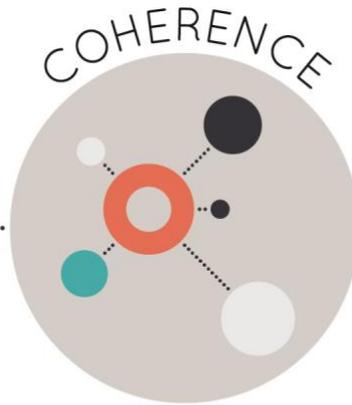




Strong mathematics instruction contains the following elements:



Focus strongly where the standards focus.



Think across grades, and link to major topics within grades.



In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

Title: **JUMP Math**

Grade/Course: **K-5**

Publisher: **JUMP Math**

Copyright: **2013 - 2016**

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

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

STRONG	WEAK
1. Focus on Major Work (Non-Negotiable)	
2. Consistent, Coherent Content (Non-Negotiable)	
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	
5. Alignment Criteria for Stnds. for Math Content	
6. Alignment Criteria for Stnds. for Math Practice	
6. Alignment Criteria for Stnds. for Math Practice	

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, but at least one “No” for the remaining criteria.

**Tier 3 ratings** receive a “No” in Column 1 for at least one of the non-negotiable criteria.

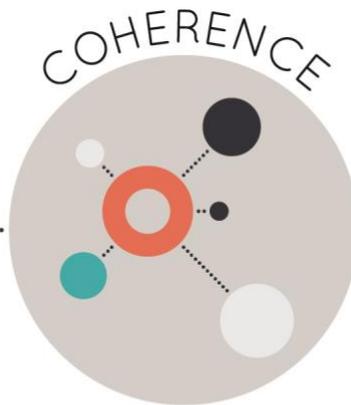
Click below for complete grade-level reviews:

[Grade K \(Tier 1\)](#) [Grade 1 \(Tier 1\)](#) [Grade 2 \(Tier 1\)](#) [Grade 3 \(Tier 1\)](#) [Grade 4 \(Tier 1\)](#) [Grade 5 \(Tier 1\)](#)

Strong mathematics instruction contains the following elements:



Focus strongly where the standards focus.



Think across grades, and link to major topics within grades.



In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

Title: **JUMP Math**

Grade/Course: **K**

Publisher: **JUMP Math**

Copyright: **2013 - 2016**

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

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

STRONG	WEAK
1. Focus on Major Work (Non-Negotiable)	
2. Consistent, Coherent Content (Non-Negotiable)	
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	
5. Alignment Criteria for Stnds. for Math Content	
6. Alignment Criteria for Stnds. for Math Practice	
7. Indicators of Quality	

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

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

**Tier 1 ratings** receive a “Yes” in Column 1 for Criteria 1 – 7.

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

**Tier 3 ratings** receive a “No” in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<b>SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.</b>			
<p><b>Non-Negotiable</b>  <b>1. FOCUS ON MAJOR WORK<sup>1</sup>:</b>            Students and teachers using the materials as designed devote the large majority<sup>2</sup> of time to the major work of the grade/course.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>1a)</b> Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.</p>	<p><b>Yes</b></p>	<p>The majority of class time is devoted to the major work of Grade K. According to the Annotated Contents in the teacher’s guide, there are 133 lessons in Grade K. 78% of the lessons (104/133) focus on the major work for Kindergarten. For example, Unit 1 focuses all 14 lessons on the Counting and Cardinality major work standards in Kindergarten. 14% of the lessons (19/133) focus on additional content standards for Kindergarten. Unit 3 uses 14 lessons to instruct students on additional content Standards K.G.A.1, K.G.A.2, and K.G.A.3. 8% of the lessons (10/133) focus on supporting content standards for Kindergarten. For example, Unit 6 uses 5 lessons to instruct students on the supporting content Standard K.MD.B.3.</p>
	<p><b>REQUIRED</b>  <b>1b)</b> In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment 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/course in which they are introduced in the Standards.</p>	<p><b>Yes</b></p>	<p>Lessons that focus on content outside of Grade K are annotated in the table of contents to show the alignment to the Grade K LSSM. Using this guidance, teachers will be able to maximize their time spent on grade level.</p>

<sup>1</sup> For more on the major work of the grade, see [Focus by Grade Level](#).

<sup>2</sup> 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%.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p><b>Non-Negotiable</b>  <b>2. CONSISTENT, COHERENT CONTENT</b>            Each course’s instructional materials are coherent and consistent with the content in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>2a)</b> Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.</p>	<p><b>Yes</b></p>	<p>The materials connect supporting standards to major standards in meaningful ways. For example, Unit 3 Lesson GK-6 connects supporting Standard K.G.B.4 Analyze and compare two- and three-dimensional shapes and major Standard K.CC.B.4, which requires students to answer “How many?” questions for arrangements of objects up to 20. In the lesson, students count the number of sides and number of corners on given shapes. Unit 6 Lesson MDK-6 connects supporting Standard K.MD.B.3, which requires students to sort objects into given categories by attributes, and major Standards K.CC.B.5, K.CC.B.6, and K.CC.B.7, which require students to count objects up to 20 and compare amounts of objects. In the lesson, students sort cubes by color, count the number of cubes in each category, and compare the amounts to determine which category has more cubes or fewer cubes. Incorporating mathematics from the major clusters into the work of the supporting clusters allows students to continue developing their understanding of major clusters even when the emphasis has shifted to supporting clusters and maintains the focus of math lesson on those major clusters as well as creating coherence throughout the year.</p>
	<p><b>REQUIRED</b>  <b>2b)</b> Materials include problems and activities that serve to connect two or more clusters in a domain, or two or</p>	<p><b>Yes</b></p>	<p>Materials include problems and activities that serve to connect two or more clusters in a domain and two or more standards</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	more domains in a grade/course, in cases where these connections are natural and important.		from different domains. For example, Unit 3 Lessons GK-2-GK-4 connect Standard K.G.A.2, which requires students to correctly name shapes, and Standard K.CC.B.5, which requires students to answer “How many?” questions for arrangements of objects up to 20. In the lessons, students identify circles, squares, and rectangles, and count the number of shapes in varied arrangements. Unit 3 Lesson GK-9 connects standards from two clusters in the Geometry Domain: Standard K.G.A.2, which requires students to correctly name shapes regardless of their orientation or size, and Standard K.G.B.5, which requires students to model shapes in the world by building shapes from components. In the lesson, students identify shapes and build shapes using craft sticks and clay. Unit 14 Lesson MDK-11 connects Standard K.MD.A.2, which requires students to compare two objects with a measurable attribute, and Standard K.G.B.6, which requires students to compose simple shapes to form larger shapes. In the lesson, students compare the length of sides of simple shapes to find sides that are equal in length. Then they combine the simple shapes with matching side lengths to form larger shapes.
<b>Non-Negotiable</b> <b>3. RIGOR AND BALANCE:</b> Each grade’s instructional materials reflect the balances in the Standards and help students meet	<b>REQUIRED</b> <b>3a) Attention to Conceptual Understanding:</b> Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply	Yes	Materials develop conceptual understanding of the majority of key mathematical concepts as required by the Standards. For example, Lessons CCK-17-CCK-22 build students’ conceptual

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p>the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p>featuring high-quality conceptual problems and discussion questions.</p>		<p>understanding of Standard K.CC.C.6, which requires students to identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. In the lessons, students draw lines to match objects in one group to objects in another group, and they identify which group is greater, which group has less, or if the groups are equal. In Lessons KG-3 and KG-4, students build conceptual understanding of shapes, as required by Standard K.G.A.2, which requires students to correctly name shapes regardless of their orientations or overall size. In the lessons, students distinguish and sort examples of squares and rectangles from non-examples, based on attributes.</p> <p>It should be noted that Standard K.OA.A.3, which is essential for students to understand parts of numbers and apply that knowledge of parts of numbers to addition and subtraction, is not taught fully in the materials, so students may not develop and demonstrate conceptual understanding of this standard. The materials do not instruct students on decomposing numbers until Unit 7, where students are taught how to decompose 5 through addition situations. In Lesson OAK-10, students decompose the numbers 4 and 5 using drawings and manipulatives. During the lesson, the teacher is prompted to ask questions that promote conceptual understanding, such</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>as, “How does the picture show that <math>1 + 4</math> equals 5?” Students represent decomposing 4 and 5 in different ways, such as with bowling pins upright and lying down, drawing circles around groups of objects, and separating drawn circles with a line to show 2 groups. However, the materials only include 5 lessons for this standard: decomposing 5, decomposing up to 10, and 10, composing 5 and composing 10. Because there are only a total of 5 lessons taught on this standard, students will not be able to develop and demonstrate the conceptual understanding that is key for success in Kindergarten and beyond Kindergarten. Including more lessons that allow students to fully understand and grasp the concept of decomposition and composition of numbers would better help students develop conceptual understanding required by this standard.</p>
	<p><b>REQUIRED</b>  <b>3b) Attention to Procedural Skill and Fluency:</b> 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.</p>	<p><b>Yes</b></p>	<p>Materials help students develop procedural skill and fluency of key mathematical concepts as required by the Standards. Repeated practice throughout the materials is given to the one fluency standard in Kindergarten. Standard K.OA.A.5, which requires students to fluently add and subtract within 5, is addressed explicitly throughout the materials. In Unit 7 Lessons OAK-11 and OAK-12, students add within 5. The last Blackline Master in Unit 7, J-57, is a fluency page (Adding to 5) that students</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>are to complete. In Unit 11 Lessons OAK-26-OAK-31, students subtract within 5 using stories and pictures. Unit 13 focuses on building fluency with addition and subtraction within 5 with five lessons. In Lessons OAK-44-OAK-48, students begin to develop fluency with addition and subtraction within 5 using pictures. Additionally, Unit 11 provides students with many opportunities to continue pursuing the required fluency.</p> <p>The methods and opportunities for building fluency with this program are consistent with the recommendations and examples provided in the progressions documents.</p>
	<p><b>REQUIRED</b>  <b>3c) Attention to Applications:</b> Materials are designed so that teachers and students spend sufficient time working with engaging applications, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/course, afford opportunities for practice, and engage students in problem solving. The problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit.</p>	<p><b>Yes</b></p>	<p>The materials develop application of key mathematical concepts as required by the Standards. For example, Standard K.OA.A.2 states that students should be able to solve addition and subtraction word problems, and add and subtract within 10 by using objects or drawings to represent the problem. Students are provided ample opportunities to engage in application over the course of Units 7, 8, 11, 12, and 13.</p> <p>The approach for developing the students' ability to engage in application is scaffolded, which may seem insufficient in the earlier Units.</p>
	<p><b>REQUIRED</b>  <b>3d) Balance:</b> The three aspects of rigor are not always</p>	<p><b>Yes</b></p>	<p>The three aspects of rigor are not always treated together and are not always</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	treated together and are not always treated separately.		treated separately. For example, in Lesson OAK-5, students engage in building procedural skill when they review counting to 70 (K.CC.A.1). Then they engage in application as they draw pictures for addition word problems. Finally, during the activity centers, students build conceptual understanding of adding as they use number paths to add by recording the number of jumps by drawing circles in the boxes. At the beginning of each lesson, students engage in building procedural skill with counting, building to 100 by Unit 10. In Lessons MDK-2-MDK-5, students move back and forth between conceptual understanding and procedural skill. In the lessons, they develop conceptual understanding as they sort objects into different categories based on attributes (K.MD.B.3), compare the quantities and decide which group has more or less (K.CC.C.6). They develop procedural skill as they count the number of objects in the groups to tell how many (K.CC.B.5).
<p><b>Non-Negotiable</b>  <b>4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:</b>  Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>4a)</b> Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in both teacher and student materials.</p>	<p><b>Yes</b></p>	<p>The practice standards are addressed in a way that enriches the major work of Kindergarten. For example, in Unit 7 Lesson OAK-11, students engage in MP.5, which requires students to use appropriate tools strategically. In the lesson, students can choose which tool they want to use to add: fingers, blocks, pictures, 5-frame (K.OA.A.1). In Lessons OAK-16-OAK-19, students solve addition</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			word problems within 10 by using five-frames and ten-frames to model the problems (K.OA.A.2). In doing so, they are modeling real-world situations using mathematics, effectively engaging in MP.4. In Lesson CCK-5, students engage in MP.8, look for and express regularity in repeated reasoning, through teacher questioning. In the lesson, students participate in activities to help them realize that the last number said when counting objects is the number of objects (K.CC.B.4).
<b>SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY</b>			
<p><b>Additional Criterion</b>  <b>5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:</b>  Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>5a)</b> 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.</p> <p><b>REQUIRED</b>  <b>5b)</b> Materials relate course-level concepts explicitly to prior knowledge from earlier grades and courses. The</p>	<p><b>Yes</b></p> <p><b>Yes</b></p>	<p>Materials provide all students extensive work with course-level problems. For example, in Lesson GK-14, students have multiple opportunities to create larger shapes by combining simple shapes (K.G.B.6). Students explore with pattern blocks, cover the outlines of single pattern blocks, and identify shapes in a puzzle. In Lesson OAK-2, students count on to 5, starting at any number less than or equal to 5 (K.CC.A.2). In the lesson, students have multiple opportunities to count on to 5 with the whole class as the teacher leads the lesson. Students then engage in activity centers where they continue to count on to 5, such as Connect the Dots and Hopscotch On.</p> <p>There are no previous grade levels before Kindergarten to which the materials could relate; however, the materials are</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.		designed so that prior knowledge built in Kindergarten is built upon and extended throughout the year. For example, Lessons CCK-2 through CCK-14 focus on students understanding, counting, and writing numbers 1-5 (K.CC.A.3, K.CC.B.4, K.CC.B.5). In Unit 2, students build on their understanding of numbers 1-5 to compare numbers 1-5 (K.CC.C.6). In Unit 4, students extend their knowledge to the numbers 6-10.
	<b>5c)</b> Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.	<b>Yes</b>	The learning objectives in the materials are visibly shaped by the Standards. For example, the goals for Lesson CCK-26 state, "Students count to answer 'how many?' questions about six or seven objects...arranged in different ways; Given the number 6 or 7, students count out that many objects from a larger group of objects." These goals are visibly shaped by Standard K.CC.B.5 Count to answer "How many?" questions.
	<b>5d)</b> Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.	<b>Yes</b>	Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. Coherence is evident throughout the materials, as connections are consistently made to what students have previously learned. In each unit introduction, the materials explain how the new learning connects with what students have previously learned and how the learning will progress throughout the unit.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p><b>Additional Criterion</b>  <b>6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:</b>            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.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>6a)</b> Materials attend to the full meaning of each practice standard. 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. Alignments to practice standards are accurate.</p>	<p><b>Yes</b></p>	<p>Mathematical practice standards are accurately identified in the lessons and are present throughout the materials. For example, in Lesson OAK-20, MP.5 is identified. In the first activity, students use appropriate tools strategically when they use a ten-frame to take apart 10 (K.OA.A.4). In Lesson NBTK-2, MP.3 is identified. In the activity Counting 11, 12, and 13 with a written ten-frame, the teacher is prompted to draw a ten-frame on the board, fill it with circles, and ask, "How many circles did I draw? How do you know?" Then the teacher is prompted to draw 2 more circles beside the ten-frame and ask, "How many circles are there now? How do you know?"</p>
	<p><b>REQUIRED</b>  <b>6b)</b> Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others 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.</p>	<p><b>Yes</b></p>	<p>Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics. For example, in Lesson CCK-4, students are learning to count objects by touching each object only once, saying one number for each object touched, and saying the counting numbers in the correct order (K.CC.B.4). The teacher is prompted to count correctly and incorrectly and have students show thumbs up or thumbs down to show if she counted correctly. In Lesson GK-21, Extension Task 3 states, "Have students try to stack shapes to answer the following question: Which shapes stack the best: cones, cylinders, or cubes? Explain." (K.G.B.6)</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p><b>6c)</b> There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.</p>	<p><b>No</b></p>	<p>While mathematical practices are identified in the materials, there are no teacher-directed materials that explain the role of the practice standards in the classroom or in the lessons. Within each lesson, mathematical practices are identified beside activities to note it is a place where the practice could be reinforced; however, there is no guidance on how to engage students in the practice or how the practice is demonstrated in the activity.</p>
	<p><b>6d)</b> Materials explicitly attend to the specialized language of mathematics.</p>	<p><b>Yes</b></p>	<p>The materials explicitly attend to the specialized language of mathematics. As explained in the Teacher's Guide, vocabulary words are listed at the beginning of each lesson plan. Words being introduced and defined for the first time are presented in bold font in the list and in italics in the lesson plan. In Lesson CCK-17, students learn the words "match" and "same" in comparing quantities (K.CC.C.7). After completing a matching activity, the teacher is prompted to tell students, "Every house has a door and every door is on a house. That means there are the same number of houses and doors." In the next lesson, students learn the term "equal." The teacher is prompted to write "=" and tell students, "This means there are the same number of cards and envelopes. The number of cards and envelopes is equal."</p>
<p><b>Additional Criterion</b> <b>7. INDICATORS OF QUALITY:</b></p>	<p><b>REQUIRED</b> <b>7a)</b> There is variety in what students produce. For</p>	<p><b>Yes</b></p>	<p>There is variety in what students produce. For example, in Lesson CCK-18, students</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p>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.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p>example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.</p>		<p>count two groups of objects to determine how many in each group, then color a happy face to show the numbers are equal or a sad face to show not equal (K.CC.C.7). In Lesson OAK-20, students use two colors to shade a ten-frame to find all the ways to decompose ten into two groups (K.OA.A.4), and they write addition sentences to match the models. Students may also be invited to create a story for the addition, such as, "I am counting cats and dogs."</p>
	<p><b>REQUIRED</b>  <b>7b)</b> 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 student responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.</p>	<p><b>Yes</b></p>	<p>The Introduction in the Teacher's Guide includes a section called Using JUMP Math in the Classroom, which provides general guidance on lesson flow. The Introduction of each unit explains what students will learn in the unit and how it builds on previous knowledge. Within each lesson, there are questions for teachers to ask along with anticipated student responses.</p>
	<p><b>7c)</b> 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.</p>	<p><b>Yes</b></p>	<p>In the Assessment and Practice Books, clear, simple language is used to ensure all students have equal access to the materials, regardless of their reading level. In the Introduction of the Teacher's Guide, there is a section called Hints for Helping Students Who Have Fallen Behind, which includes suggestions such as teaching the number facts, giving cumulative reviews, and allowing wait time.</p>
	<p><b>7d)</b> The underlying design of the materials distinguishes between problems and exercises. In essence the</p>	<p><b>Yes</b></p>	<p>The materials distinguish between problems and exercises. As explained in</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p>difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.</p>		<p>the Teacher's Guide, the first part of each JUMP Math lesson is the lesson plan in the Teacher's Guide. This is where students solve problems and learn new math. The second part of each lesson is the Assessment and Practice (AP) Books. After the lesson plan is finished, students work in the AP book, which contains questions that are exercises that allow students to practice and consolidate the ideas they developed in the lesson. For example, in Lesson NBTK-6, during the lesson, students make the numbers 14, 15, and 16 using ten-frames and number bonds (K.NBT.A.1). Following the lesson, students complete exercises on pages 104-106 of the AP Book to practice what they have learned.</p>
	<p><b>7e)</b> Lessons are appropriately structured and scaffolded to support student mastery.</p>	<p><b>Yes</b></p>	<p>Lessons generally follow the same structure, which supports student mastery. Lessons begin with a review of counting and comparing numbers, a short explanation of the new concept, students practice as a class, followed by an incremental increase in challenge and more practice, and then continue the cycle. For example, in Lesson NBTK-2, students learn to name, recognize, and begin to write numbers 11, 12, and 13 (K.NBT.A.1) by practicing with the whole class identifying 11, 12, and 13 with various representations - first just the numbers, then with egg carton ten-frames, then with written ten-frames, then without a ten-frame. Students then</p>

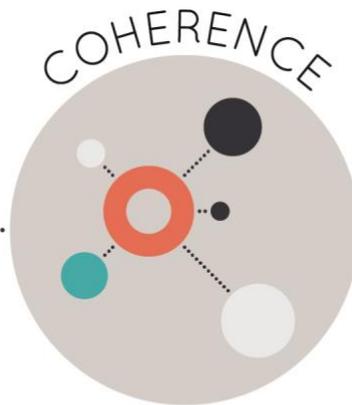
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			practice modeling the numbers 11, 12, and 13 on individual ten-frames before working on the same type of exercises in the AP Book on pages 90-93.
	<b>7f)</b> Materials support the uses of technology as called for in the Standards.	<b>N/A</b>	The LSSM for Kindergarten does not call for use of technology.
<b>FINAL EVALUATION</b>			
<i>Tier 1 ratings</i> receive a “Yes” in Column 1 for Criteria 1 – 7.			
<i>Tier 2 ratings</i> 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.			
<i>Tier 3 ratings</i> receive a “No” in Column 1 for at least one of the non-negotiable criteria.			
<b>Compile the results for Sections I and II to make a final decision for the material under review.</b>			
Section	Criteria	Yes/No	Final Justification/Comments
<b>I: Non-Negotiables</b>	1. Focus on Major Work	<b>Yes</b>	A majority of the instructional time is spent on the major work, and content outside of the scope of the course is clearly noted to teachers.
	2. Consistent, Coherent Content	<b>Yes</b>	Materials connect supporting content to major content in meaningful ways. They also connect standards in different domains and clusters.
	3. Rigor and Balance	<b>Yes</b>	The materials devote a substantial amount of time to developing conceptual understanding, while also tending to the development of students’ procedural skill and fluency as well as application.
	4. Focus and Coherence via Practice Standards	<b>Yes</b>	The practice standards are addressed in a way that enriches the major work of Kindergarten.
<b>II: Additional Alignment Criteria and Indicators of Quality</b>	5. Alignment Criteria for Standards for Mathematical Content	<b>Yes</b>	The materials are consistent with the progressions in the Standards.
	6. Alignment Criteria for Standards for Mathematical Practice	<b>Yes</b>	The materials attend to the practice standards; however, there are no teacher-directed materials that explain the role of the practice standards in the classroom or

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			in students' mathematical development.
	7. Indicators of Quality	<b>Yes</b>	The materials give teachers and students the tools they need to meet the expectations of the Standards.
FINAL DECISION FOR THIS MATERIAL: <b><u>Tier I, Exemplifies quality</u></b>			

Strong mathematics instruction contains the following elements:



Focus strongly where the standards focus.



Think across grades, and link to major topics within grades.



In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

Title: **JUMP Math**

Grade/Course: **1**

Publisher: **JUMP Math**

Copyright: **2013 - 2016**

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

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

STRONG	WEAK
1. Focus on Major Work (Non-Negotiable)	
2. Consistent, Coherent Content (Non-Negotiable)	
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	
5. Alignment Criteria for Stnds. for Math Content	
6. Alignment Criteria for Stnds. for Math Practice	
7. Indicators of Quality	

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

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

**Tier 1 ratings** receive a “Yes” in Column 1 for Criteria 1 – 7.

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

**Tier 3 ratings** receive a “No” in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<b>SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.</b>			
<p><b>Non-Negotiable</b>  <b>1. FOCUS ON MAJOR WORK<sup>3</sup>:</b>            Students and teachers using the materials as designed devote the large majority<sup>4</sup> of time to the major work of the grade/course.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>1a)</b> Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.</p>	Yes	<p>The majority of class time is devoted to the major work of Grade 1. According to the Annotated Contents in the teacher’s guide, there are 151 lessons in Grade 1. 84% of the lessons (127/151) focus on the major work for Grade 1. For example, Unit 3: Problem Solving with Pictures, Models, and Equations focuses all 19 lessons on the Operations and Algebraic Thinking Domain in Grade 1. 8% of the lessons (12/151) focus on supporting content standards for Grade 1. For example, Unit 6: Representing and Interpreting Data uses four lessons to instruct students on supporting content Standard 1.MD.C.4. 8% of the lessons (12/151) focus on additional content standards for Grade 1. Unit 5: Reasoning with Shapes uses 12 lessons to instruct students on additional content Standards 1.G.A.1, 1.G.A.2, and 1.G.A.3.</p>
	<p><b>REQUIRED</b>  <b>1b)</b> In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment 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/course in which they are introduced in the</p>	Yes	<p>Lessons that focus on content outside of Grade 1 are annotated in the table of contents to show the alignment to the Grade 1 LSSM. Using this guidance, teachers will be able to maximize their time spent on grade level.</p>

<sup>3</sup> For more on the major work of the grade, see [Focus by Grade Level](#).

<sup>4</sup> 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%.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	Standards.		
<p><b>Non-Negotiable</b>  <b>2. CONSISTENT, COHERENT CONTENT</b>  Each course’s instructional materials are coherent and consistent with the content in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>2a)</b> Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.</p>	<p><b>Yes</b></p>	<p>The materials connect supporting standards to major standards in meaningful ways. In Unit 3 Lesson OA1-72, students count to find the value of coins and write addition sentences to represent the amounts, connecting supporting Standard 1.MD.D.5, which requires students to determine the value of coins up to 50 cents, and major Standard 1.NBT.C.4, which requires students to add within 100. Lesson MD1-22 connects supporting Standard 1.MD.C.4 with major Standard 1.OA.A.1. In the lesson, students organize, represent, and interpret data, and they answer questions about the data, such as, “How many people chose apples?”, “How many more people chose oranges than bananas?”, and “How many fewer students chose bananas than apples?” Incorporating mathematics from the major clusters into the work of the supporting clusters allows students to continue developing their understanding of major clusters even when the emphasis has shifted to supporting clusters and maintains the focus of math lesson on those major clusters as well as creating coherence throughout the year.</p>
	<p><b>REQUIRED</b>  <b>2b)</b> Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade/course, in cases where these connections are natural and important.</p>	<p><b>Yes</b></p>	<p>Materials include problems and activities that serve to connect two or more clusters in a domain and two or more standards from different domains. For example, Unit 2 Lesson NBT1-29, connects two clusters</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>within the Numbers and Operations in Base Ten Domain. In the lesson, students use place value understanding (1.NBT.B.2) to subtract multiples of 10 (1.NBT.C.6). This connects Cluster 1.NBT.B, Understand place value, with Cluster 1.NBT.C, Use place value understanding and properties of operations to add and subtract. Unit 2 Lesson NBT1-39 connects standards in the Number and Operations in Base Ten Domain and the Operations and Algebraic Thinking Domain. In the lesson, students add pairs of two-digit numbers by counting on by tens and then ones. This connects Standard 1.NBT.C.4, which requires students to add within 100, and Standard 1.OA.C.5, which requires students to relate counting to addition and subtraction.</p>
<p><b>Non-Negotiable</b>  <b>3. RIGOR AND BALANCE:</b>  Each grade’s instructional materials reflect the balances in the Standards and help students meet the Standards’ rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>3a) Attention to Conceptual Understanding:</b> 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 discussion questions.</p>	<p><b>Yes</b></p>	<p>Materials develop conceptual understanding of key mathematical concepts as required by the Standards. For example, in Unit 3, students build conceptual understanding as required by Standard 1.OA.C.6, which requires students to add and subtract within 20, demonstrating fluency for addition and subtraction within 10 and use strategies such as counting on, making ten, decomposing a number leading to a ten, using the relationship between addition and subtraction, and creating equivalent but easier or known sums. In Lesson OA1-15, students use a 1-20 chart to count on to add. A square for the first number in the addition sentence is shaded. Students</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>must add by circling the second number of squares on the chart. Lesson OA1-17 explicitly teaches students to count on using their fingers to add, and Lesson OA1-36 explicitly teaches students to count back using their fingers to subtract. Lesson OA1-19 teaches students to use a number line to add within 20, as they relate the number of jumps on the number line to addition sentences. In Lesson OA1-24, students develop conceptual understanding of Standard 1.OA.B.3, which requires students to apply properties of operations to add or subtract. In the lesson, students use connecting cubes to demonstrate the associative property of addition. Given three addends, student first combine the first two addends to add and get the sum. Then they combine the second two addends to add and get the sum, and they realize the answer is the same either way. The teacher is prompted to ask students how they added the numbers for each problem and to explain why they added that way. Lesson OA1-28 teaches students to use doubles to add. In the lesson, the teacher is prompted to draw a model to show why doubles plus one works, and students identify what doubles fact would help them to solve a given addition equation. In Lesson OA1-29, students engage in discussion around choosing strategies for adding three addends, applying the strategies they learned in previous lessons: doubles, near</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>doubles, and pairs that add to ten. For example, the teacher writes <math>7 + 6 + 4</math>. Students decide how they will add the three numbers. They might choose to add <math>6 + 4</math> first to make a ten, or they might prefer to use the near doubles strategy and add <math>7 + 6</math> first. In Unit 4, students begin learning how to solve subtraction problems. In Lesson OA1-40, Standard 1.OA.C.6 is referenced. In the lesson, students learn to subtract from a teen number by getting to ten and then taking away the rest. For example, given the subtraction sentence <math>13 - 5</math>, students think <math>13 - 3</math> is 10, then <math>10 - 2</math> more is 8, so <math>13 - 5</math> is 8. Students represent this thinking using squares and using number sentences.</p>
	<p><b>REQUIRED</b>  <b>3b) Attention to Procedural Skill and Fluency:</b> 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.</p>	<p>Yes</p>	<p>Materials help students develop procedural skill and fluency of key mathematical concepts as required by the Standards. Repeated practice throughout the materials is given to the one fluency standard in Grade 1. Standard 1.OA.C.6 requires students to add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Students are given practice with this skill across Units 2 and 3.</p> <p>The methods and opportunities for building fluency with this program are consistent with the recommendations and examples provided in the progressions documents.</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p><b>REQUIRED</b>  <b>3c) Attention to Applications:</b> Materials are designed so that teachers and students spend sufficient time working with engaging applications, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/course, afford opportunities for practice, and engage students in problem solving. The problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit.</p>	<p><b>Yes</b></p>	<p>The materials develop application of key mathematical concepts as required by the Standards. In Grade 1, there are two standards that specifically call for the component of application, and there are many opportunities in the materials for students to engage in application of these standards. Standard 1.OA.A.1 states that students should be able to use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. Standard 1.OA.A.2 states that students should be able to solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20. Students are given opportunities to engage with these standards across Units 2, 3, and 6.</p> <p>The approach for developing the students' ability to engage in application is scaffolded which may seem insufficient in the earlier units.</p>
	<p><b>REQUIRED</b>  <b>3d) Balance:</b> The three aspects of rigor are not always treated together and are not always treated separately.</p>	<p><b>Yes</b></p>	<p>The three aspects of rigor are not always treated together and are not always treated separately. For example, in Lesson OA1-54, students begin building conceptual understanding of how to determine an unknown whole number in an equation relating three whole numbers by using pictures (1.OA.D.8). Throughout the next several lessons, the problems</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>move students back and forth from conceptual understanding to procedural skill. By Lessons OA1-58 and OA1-59, students are building procedural skill with Standard 1.OA.D.8 as they solve multiple problems without pictures. Conceptual understanding through the use of pictures is represented frequently in the lessons, both separately and in combination with procedural skill and sometimes application.</p>
<p><b>Non-Negotiable</b>  <b>4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:</b>  Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>4a)</b> Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in both teacher and student materials.</p>	<p><b>Yes</b></p>	<p>The practice standards are addressed in a way that enriches the major work of Grade 1. For example, in Unit 2 Lesson NBT1-37, students engage in MP.3, construct viable arguments and critique the reasoning of others when they find the mistake in another’s work and explain it. The problem states, “Fred added <math>20 + 3</math> and got 50. What is his mistake?” (1.NBT.C.4). In Lesson NBT1-16, students engage in MP.2, reason abstractly and quantitatively, as they learn to draw sticks and dots to represent tens and ones. Through teacher questioning, students construct the idea of “tens” (1.NBT.B.2). In Lesson NBT1-28, students engage in MP.7, look for and make use of structure. In the lesson, students connect adding ones with ones to adding tens with tens. Adding 5 tens plus 2 tens is 7 tens, just like adding 5 ones plus 2 ones is 7 ones (1.NBT.C.4). In Lesson OA1-26, students also engage in MP.7. In the lesson, students learn to add three numbers by first looking for pairs of</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			numbers that make ten, and then add on the rest (1.OA.C.6).
<b>SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY</b>			
<p><b>Additional Criterion</b>  <b>5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:</b>  Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>5a)</b> 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.</p>	<p><b>Yes</b></p>	<p>Materials provide all students extensive work with grade-level problems. For example, the practice book pages for Lessons NBT1-17 and NBT1-18 include 51 problems for students to practice comparing 2-digit numbers (1.NBT.B.3). Review of material from previous grades is clearly identified for teachers. For example, the standards are listed in Lesson OA1-8 as "preparation for 1.OA.D.7, 1.OA.A.1."</p>
	<p><b>REQUIRED</b>  <b>5b)</b> 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.</p>	<p><b>Yes</b></p>	<p>Materials relate grade-level concepts explicitly to prior knowledge from earlier grades. The materials are designed so that students connect prior knowledge to new concepts. For example, as explained in the Teacher's Guide, 1.1 Unit 6 builds on students understanding of addition from Unit 1.1 Unit 3 by applying level 3 methods for addition (1.OA.B.3). For instance, students use the "making ten" method to add and their knowledge of pairs adding to 5 or 10 (K.OA.A.3, K.OA.A.4) to quickly recognize sums that are 1 more or 1 less than 5 or 10. 1.2 Unit 1 builds on what students learned in the previous grade about comparing single-digit numbers and what they learned in 1.1 Unit 2 by comparing two-digit numbers (1.NBT.B.3).</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p><b>5c)</b> Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.</p>	<p><b>Yes</b></p>	<p>The learning objectives in the materials are visibly shaped by the Standards. For example, the goal of Lesson OA1-52 states, "Students will read simple word problems and solve them by writing subtraction sentences." This is visibly shaped by Standard 1.OA.A.1, which states that students will use addition and subtraction within 20 to solve word problems. The goals of Lesson NBT1-16 state, "Students will represent numbers using tens and ones blocks. Students will draw sketches of base ten representations of numbers." These goals are visibly shaped by Standard 1.NBT.B.2, which states that students will understand that the two digits of a two-digit number represent amounts of tens and ones.</p>
	<p><b>5d)</b> Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.</p>	<p><b>Yes</b></p>	<p>Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. Coherence is evident throughout the materials, as connections are consistently made to what students have previously learned. In each unit introduction, the materials explain how the new learning connects with what students have previously learned and how the learning will progress throughout the unit.</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p><b>Additional Criterion</b>  <b>6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:</b>            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.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>6a)</b> Materials attend to the full meaning of each practice standard. 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. Alignments to practice standards are accurate.</p>	<p><b>Yes</b></p>	<p>Mathematical practice standards are accurately identified in the lessons and are present throughout the materials. For example, in Lesson OA1-13, MP.7 and MP.8 are identified for activity Adding 0. In the activity, students find the total when adding 0 to multiple single-digit numbers (1.OA.C.6). Students then use their repeated reasoning (MP.8) to predict what <math>0 + 17</math> and <math>12 + 0</math> will be. In Lesson OA1-53, MP.2 is identified for the activity Matching word problems to number sentences. In the activity, students reason abstractly and quantitatively as they determine which number sentence matches which word problem (1.OA.A.1).</p>
	<p><b>REQUIRED</b>  <b>6b)</b> Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others 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.</p>	<p><b>Yes</b></p>	<p>Students are given opportunities throughout the materials to construct viable arguments and critique the reasoning of others around major grade-level concepts. For example, in Lesson NBT1-9, MP.3 is identified for the activity Using "is greater than" and "is less than." In the activity, the teacher is prompted to write the phrase "is greater than" on one part of the board and "is less than" on another, then place one number card to the right of a phrase and one to the left (1.NBT.B.3). The teacher then is guided to ask students if the sentence she made is correct. The materials do not prompt the teacher to ask students to explain their reasoning. On page 11 of the AP Book 1-2, Problem 11 shows a picture of some dots. It states, "Jon says the picture shows 20</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			dots. Explain his mistake." In Lesson NBT1-16, the teacher is prompted to draw the number 34 with 2 tens blocks and 14 one blocks and to ask students to tell her how they would show the number differently using an extra tens block (1.NBT.B.2).
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	No	While mathematical practices are identified in the materials, there are no teacher-directed materials that explain the role of the practice standards in the classroom or in the lessons. Within each lesson, mathematical practices are identified beside activities to note it is a place where the practice could be reinforced; however, there is no guidance on how to engage students in the practice or how the practice is demonstrated in the activity.
	6d) Materials explicitly attend to the specialized language of mathematics.	Yes	The materials explicitly attend to the specialized language of mathematics. As explained in the Teacher's Guide, vocabulary words are listed at the beginning of each lesson plan. Words being introduced and defined for the first time are presented in bold font in the list and in italics in the lesson plan. In Lesson NBT1-8, students learn to use the term "less than" fluently. In Lesson MD1-16, students learn to use the terms "half past" and "halfway" to tell time to the half hour (1.MD.B.3).
<b>Additional Criterion</b> <b>7. INDICATORS OF QUALITY:</b> Quality materials should exhibit the indicators outlined here in order to	<b>REQUIRED</b> <b>7a)</b> There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way,	Yes	There is variety in what students produce. For example, in Lesson NBT1-16, students draw sketches of base ten representations of numbers (1.NBT.B.2). In Lesson MD1-16,

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<p>give teachers and students the tools they need to meet the expectations of the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p>arguments and explanations, diagrams, mathematical models, etc.</p>		<p>students draw hands on a clock to show the time given (1.MD.B.3). In Lesson MD1-22, students create a picture graph using given information (1.MD.C.4).</p>
	<p><b>REQUIRED</b>  <b>7b)</b> 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 student responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.</p>	<p><b>Yes</b></p>	<p>The Introduction in the Teacher's Guide includes a section called Using JUMP Math in the Classroom, which provides general guidance on lesson flow. The Introduction of each unit explains what students will learn in the unit and how it builds on previous knowledge. Within each lesson, there are questions for teachers to ask along with anticipated student responses.</p>
	<p><b>7c)</b> 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.</p>	<p><b>Yes</b></p>	<p>In the Assessment and Practice Books, clear, simple language is used to ensure all students have equal access to the materials, regardless of their reading level. In the Introduction of the Teacher's Guide, there is a section called Hints for Helping Students Who Have Fallen Behind, which includes suggestions such as teaching the number facts, giving cumulative reviews, and allowing wait time.</p>
	<p><b>7d)</b> The underlying design of the materials distinguishes between problems and exercises. In essence the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.</p>	<p><b>Yes</b></p>	<p>The materials distinguish between problems and exercises. As explained in the Teacher's Guide, the first part of each JUMP Math lesson is the lesson plan in the Teacher's Guide. This is where students solve problems and learn new math. The second part of each lesson is the Assessment and Practice (AP) Books. After the lesson plan is finished, students work in the AP book, which contains questions</p>

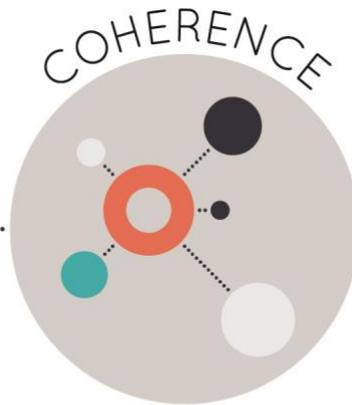
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			that are exercises that allow students to practice and consolidate the ideas they developed in the lesson. For example, in Lesson NBT1-14, students engage in problems that require counting numbers by grouping objects into tens. Following these problems, students can complete exercises to practice this concept on pages 10-11 in the AP Book 1-2.
	<b>7e)</b> Lessons are appropriately structured and scaffolded to support student mastery.	<b>Yes</b>	Lessons generally follow the same structure, which supports student mastery. Lessons begin with a short explanation of the new concept, students practice as a class, followed by an incremental increase in challenge and more practice, and then continue the cycle. For example, Lesson NBT1-14 begins with students counting objects by grouping them into tens as a whole class. Students then practice counting legs of animals that have 10 legs independently. Following these exercises, students determine as a class how many stickers a boy will have after various number of days if he collects 10 stickers a day. Students then practice a similar activity independently. While it is not referenced in the lesson plan, pages 10-12 are available for more practice in the AP Book.
	<b>7f)</b> Materials support the uses of technology as called for in the Standards.	<b>N/A</b>	The LSSM for Grade 1 does not call for use of technology.

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<b>FINAL EVALUATION</b>			
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<i>Tier 2 ratings</i> 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.			
<i>Tier 3 ratings</i> receive a “No” in Column 1 for at least one of the non-negotiable criteria.			
<b>Compile the results for Sections I and II to make a final decision for the material under review.</b>			
Section	Criteria	Yes/No	Final Justification/Comments
<b>I: Non-Negotiables</b>	1. Focus on Major Work	Yes	The majority of instructional time is spent on the major work, and content outside of the scope of the course is clearly noted to teachers.
	2. Consistent, Coherent Content	Yes	Materials connect supporting content to major content in meaningful ways. They also connect standards in different domains and clusters.
	3. Rigor and Balance	Yes	The materials devote a substantial amount of time to developing conceptual understanding, while also tending to the development of students' procedural skill and fluency as well as application.
	4. Focus and Coherence via Practice Standards	Yes	The practice standards are addressed in a way that enriches the major work of Grade 1.
<b>II: Additional Alignment Criteria and Indicators of Quality</b>	5. Alignment Criteria for Standards for Mathematical Content	Yes	The materials are consistent with the progressions in the Standards.
	6. Alignment Criteria for Standards for Mathematical Practice	Yes	The materials attend to the practice standards; however, there are no teacher-directed materials that explain the role of the practice standards in the classroom.
	7. Indicators of Quality	Yes	The materials give teachers and students the tools they need to meet the expectations of the Standards.
FINAL DECISION FOR THIS MATERIAL: <b>Tier I, Exemplifies quality</b>			

Strong mathematics instruction contains the following elements:



Focus strongly where the standards focus.



Think across grades, and link to major topics within grades.



In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

Title: **JUMP Math**

Grade/Course: **2**

Publisher: **JUMP Math**

Copyright: **2014-2016**

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

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

STRONG	WEAK
1. Focus on Major Work (Non-Negotiable)	
2. Consistent, Coherent Content (Non-Negotiable)	
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	
5. Alignment Criteria for Stnds. for Math Content	
6. Alignment Criteria for Stnds. for Math Practice	
7. Indicators of Quality	

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

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

**Tier 1 ratings** receive a “Yes” in Column 1 for Criteria 1 – 7.

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

**Tier 3 ratings** receive a “No” in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<b>SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.</b>			
<p><b>Non-Negotiable</b>  <b>1. FOCUS ON MAJOR WORK<sup>5</sup>:</b>            Students and teachers using the materials as designed devote the large majority<sup>6</sup> of time to the major work of the grade/course.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>1a)</b> Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.</p>	<p><b>Yes</b></p>	<p>The majority of class time is devoted to the major work of Grade 2. According to the Annotated Contents in the teacher’s guide, there are 166 lessons in Grade 2. 78% (129/166) of the lessons focus on the major work of the grade. For example, Unit 6: Subtraction Using Place Value focuses all 10 lessons on the Number and Operations in Base Ten Domain in Grade 2. 7% of the lessons (12/166) focus on additional content standards for Grade 2. Unit 8: Shapes uses 12 lessons to instruct students on additional content Standards 2.G.A.1, 2.G.A.2, and 2.G.A.3. 15% of the lessons (25/166) focus on supporting content standards for Grade 2. For example, Unit 9: Graphs uses 5 lessons to instruct students on the supporting content Cluster 2.MD.D.</p>
	<p><b>REQUIRED</b>  <b>1b)</b> In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment 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/course in which they are introduced in the Standards.</p>	<p><b>Yes</b></p>	<p>Lessons that focus on content outside of Grade 2 are annotated in the table of contents to show the alignment to the Grade 2 LSSM. Using this guidance, teachers will be able to maximize their time spent on grade level.</p>

<sup>5</sup> For more on the major work of the grade, see [Focus by Grade Level](#).

<sup>6</sup> 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%.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p><b>Non-Negotiable</b>  <b>2. CONSISTENT, COHERENT CONTENT</b>            Each course’s instructional materials are coherent and consistent with the content in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>2a)</b> Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.</p>	<p><b>Yes</b></p>	<p>The supporting content engages students in the major work of the grade. In Unit 7, there are 9 lessons. All of the lessons focus on supporting content Standard 2.MD.C.8. Within these 9 lessons, most of the lessons connect meaningfully to the major work Standard 2.OA.A.1. Students are required to solve word problems that involve money and use the strategies they have learned to solve addition and subtraction word problems with money. For example, Lesson MD2-37 focuses on students counting coins and arranging the coins from greatest to least value. Students are expected to connect what they have learned about skip counting to be able to count the coins accurately. This connects clearly to the major work Standard 2.NBT.A.2, where students are required to skip count by 5s, 10s, and 100s. Lesson MD2-42 requires students to solve subtraction word problems that involve coins. In Unit 6 Lessons MD2-30 and MD2-31, students count by 5 (2.NBT.A) to tell time (2.MD.C). In Unit 9 Lessons MD2-44-MD2-47, students solve addition and subtraction problems (2.OA.A) about data represented in graphs (2.MD.D). Incorporating mathematics from the major clusters into the work of the supporting clusters allows students to continue developing their understanding of major clusters even when the emphasis has shifted to supporting clusters and maintains the focus of math lesson on</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			those major clusters as well as creating coherence throughout the year.
	<p><b>REQUIRED</b>  <b>2b)</b> Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade/course, in cases where these connections are natural and important.</p>	<b>Yes</b>	<p>Materials include problems and activities that serve to connect two or more clusters in a domain and two or more standards from different domains. For example, in Unit 7 Lesson MD2-41, students are expected to add money using addition strategies they have already been taught in the Domains Operations and Algebraic Thinking and Number and Operations in Base Ten. Because students are required to solve word problems with money, the Domains Measurement and Data and Operations and Algebraic Thinking are connected. Unit 8 Lesson MD2-12 connects two clusters in the Measurement and Data Domain. In the lesson, students learn how to subtract to determine how much longer one item is when compared to another item. This connects Standard 2.MD.A.4, which requires students to measure to determine how much longer one object is than another, and Standard 2.MD.B.5, which requires students to use addition and subtraction within 100 to solve problems involving length. Unit 5 Lesson MD2-26 connects the Operations and Algebraic Thinking Domain and the Measurement and Data Domain. In the lesson, students solve two-step word problems (2.OA.A.1) involving length (2.MD.B.5).</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p><b>Non-Negotiable</b>  <b>3. RIGOR AND BALANCE:</b>            Each grade’s instructional materials reflect the balances in the Standards and help students meet the Standards’ rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>3a) Attention to Conceptual Understanding:</b> 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 discussion questions.</p>	<p><b>Yes</b></p>	<p>Materials develop conceptual understanding of key mathematical concepts as required by the Standards. For example, the conceptual components of Cluster 2.NBT.A are addressed in Unit 2: Three-Digit Numbers. In Lesson NBT2-25, students develop conceptual understanding of Standard 2.NBT.A.1, which requires students to understand place value of 3-digit numbers. In the lesson, students write 3-digit numbers represented by base ten blocks and use base ten blocks to model 3-digit numbers. In Lesson NBT2-27, students develop conceptual understanding of Standard 2.NBT.A.3, which requires students to read and write numbers to 1000 using base-ten numerals, number names, and expanded form. In the lesson, students identify the value of digits in given numbers and then use that understanding to write 3-digit numbers in expanded form. The conceptual components of Cluster 2.NBT.B are addressed in Unit 2 Lessons NBT2-31-NBT2-38 and NBT2-40, and Unit 4 Lesson NBT2-45. Lesson NBT2-37 requires students to add and subtract within 1000 using concrete place value models. The problems that are used to instruct students allow students to learn the concept of adding and subtracting using hundreds, tens, and ones. This meets Standard 2.NBT.B.7, which states that students should be able to add and subtract within 1000 using concrete</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			models of drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Unit 2 Lesson NBT2-14 requires students to create a number line and use it to add numbers within 100. This meets Standard 2.MD.B.6, which requires students to represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,... and represent whole number sums and differences within 100 on a number line diagram.
	<p><b>REQUIRED</b>  <b>3b) Attention to Procedural Skill and Fluency:</b> 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.</p>	Yes	<p>The materials develop procedural skill and fluency of key mathematical concepts as required by the Standards. There are two standards in Grade 2 that specifically call for fluency: Standard 2.OA.B.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers, and Standard 2.NBT.B.5 Fluently add and subtract within 100. Students are given repeated practice over the course of the year to be able to develop fluency with these skills. These skills and fluencies develop over the course of Units 1-9.</p> <p>The methods and opportunities for building fluency with this program are consistent with the recommendations and examples provided in the progressions documents.</p>
	<p><b>REQUIRED</b>  <b>3c) Attention to Applications:</b> Materials are designed so</p>	Yes	The materials develop application of key mathematical concepts as required by the

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p>that teachers and students spend sufficient time working with engaging applications, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/course, afford opportunities for practice, and engage students in problem solving. The problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit.</p>		<p>Standards. Standard 2.OA.A.1 requires students to use addition and subtraction within 100 to solve one- and two-step word problems. Students are provided ample opportunities to engage in application over the course of Units 1-7.</p> <p>The approach for developing students' ability to engage in application is scaffolded, and may seem insufficient in the earlier Units.</p>
	<p><b>REQUIRED</b>  <b>3d) Balance:</b> The three aspects of rigor are not always treated together and are not always treated separately.</p>	<p><b>Yes</b></p>	<p>The three aspects of rigor are not always treated together and are not always treated separately. For example, in Lesson MD2-2, students begin to develop conceptual understanding of length measurement by using inch cubes and centimeter cubes to measure objects. They learn that there should be no gaps or overlaps in the units. In the lesson following, students begin to develop procedural skill with measuring with a centimeter ruler. Conceptual understanding through the use of pictures is represented frequently in the lessons, both separately and in combination with procedural skill and sometimes application.</p>
<p><b>Non-Negotiable</b>  <b>4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:</b>  Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.</p>	<p><b>REQUIRED</b>  <b>4a)</b> Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in both teacher and student materials.</p>	<p><b>Yes</b></p>	<p>The practice standards are addressed in a way that enriches the major work of Grade 2. MP.3 requires students to construct viable arguments and critique the reasoning of others. Lesson NBT2-35 Problem 40 on the student worksheet asks students to engage in MP.3. Problem 40</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			<p>states, "Paul says <math>395 + 8</math> is the same as <math>400 + 3</math>." Is he correct? Explain." (2.NBT.B.9) Students must critique the reasoning of others to answer this question. Again, on Problem 12 on the student worksheet for Lesson NBT2-37, students engage in MP.3 when they analyze a subtraction problem and answer the question, "What mistake did Amy make in this subtraction?" (2.NBT.B.7) Problem 16 on the student workbook sheet for Lesson MD2-3 states, "Sam says his pencil is 6 cm. Explain his mistake." (2.MD.A.1) MP.1 requires students make sense of problems and persevere in solving them. In Lesson MD2-38, students are given 5 nickels, 2 dimes, and 1 quarter, and they are challenged to find all the ways to make 25 cents. Students keep track of their findings by making drawings of the coins (2.MD.C.8).</p>
<b>SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY</b>			
<p><b>Additional Criterion</b>  <b>5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:</b>            Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards.</p>	<p><b>REQUIRED</b>  <b>5a)</b> 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.</p>	<p><b>Yes</b></p>	<p>Materials provide all students extensive work with grade-level problems. Students solve grade-level problems during all parts of the lessons. For example, in Unit 6: Subtraction Using Place Value focuses all 10 lessons on the Number and Operations in Base Ten Domain in Grade 2. Another example, Standard 2.OA.A.1 requires students to use addition and subtraction within 100 to solve one- and two-step word problems. Students are provided ample opportunities to engage in</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p><b>REQUIRED</b></p> <p><b>5b)</b> 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.</p>	<p><b>Yes</b></p>	<p>application over the course of Units 1-7.</p> <p>Materials relate grade-level concepts explicitly to prior knowledge from earlier grades and extend to accommodate the new knowledge. Any prior knowledge that students need to understand the concepts taught in a lesson is reviewed at the beginning of the lesson. The prior knowledge required is also listed at the beginning of each lesson plan. For example, in Lesson OA2-12 Lesson Plan, under the Prior Knowledge Required, it states that students should be able to: Can write counting numbers within 10 in order, can recognize when counting numbers are not in order, and knows that 0 comes before 1. Another example, in Lesson OA2-19 Lesson Plan, under the Prior Knowledge Required, it states that students should be able to: Can identify how many fingers are being held up, can identify how many fingers are not being held up, and knows that <math>10 + 0 = 10</math>.</p>
	<p><b>5c)</b> Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.</p>	<p><b>Yes</b></p>	<p>The learning objectives in the materials are visibly shaped by the Standards. For example, the content objectives for Lesson NBT2-4 in the Teacher's Guide for AP Book 2.1, Unit 5: Number and Operations in Base Ten: Addition Using Place Value, states, "Students will write a two-digit number in expanded form." This objective is clearly shaped by the Standard 2.NBT.A.3 (Read and write numbers to 1000 using base-ten numerals, number</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>names and expanded form). Another example, the Content Objectives for Lesson MD2-4 in the Teacher's Guide for AP Book 2.1-Unit 7 Measurement and Data states, "Students will measure pictures of lines and objects in centimeters using centimeter cubes and a centimeter ruler." This objective is clearly shaped by the Standard 2.MD.A.1 (Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.)</p>
	<p><b>5d)</b> Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.</p>	<p><b>Yes</b></p>	<p>Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. Coherence is evident in that the materials engage students in the components of rigor as required by the Standards. For example, in Unit 5 Number and Operations in Base Ten, Lesson NBT2-1, students use base-ten blocks to represent two-digit numbers (2.NBT.A.1). This standard calls for conceptual understanding. In the lesson, students count groups of blocks, and they record the number to aid in connecting the concept that a digit is used to indicate the number of groups of objects within a number. This leads to the realization that a digit's value is dependent upon its placement in a number, which enhances conceptual understanding. Another example, in Unit 3 Operations and Algebraic Thinking, Lesson OA2-51, students learn to write and solve</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>equations for two-step word problems with result unknown. Standard 2.OA.A.1 calls for application. The lesson begins with students representing two-step word problems by the teacher giving each student 10 counters and a letter-sized sheet of paper. Students draw a large rectangle on their paper and put their counters beside the rectangle. The teacher will say: I am going to read a word problem aloud and you will move counters into the box to show what I read. Read each of the word problems aloud, one sentence at a time. After each sentence, students will need to decide how many to move and in which direction. Students will then have to fill in equations for two-step word problems. Students will not use counters with these equations. After reading each sentence, ask students what number to write, and if there should be a plus sign or a minus sign. The teacher will then give students two-step word problems, giving time for students to fill in the blanks and circles and having students find the answers using whatever method they prefer. Then students will answer two-step word problems without objects. The teacher will lead students through word problems without using objects. Last, students are to make a word problem for a given number sentence. Coherence is evident throughout the materials, as connections are consistently made to what students have previously learned. Learning</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Progressions at the beginning of each Unit allow teachers to see how the new learning in the lesson is connected to what students have previously learned, as well as how it will connect to future learning.
<p><b>Additional Criterion</b>  <b>6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:</b>            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.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>6a)</b> Materials attend to the full meaning of each practice standard. 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. Alignments to practice standards are accurate.</p>	<p><b>Yes</b></p>	<p>Materials attend to the full meaning of each practice standard. 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. Alignments to practice standards are accurate. For example, in Unit 3, Lesson OA2-51, Pages 64-67, students engage in MP7: Look for and make use of structure. In the lesson, students make a word problem for the number sentence given, such as: (a) <math>16 - 7 + 2</math> and the answer may be: Tim has 16 stickers. He gave 7 stickers to his sister. Then he bought 2 more stickers. Another example, in Unit 5, Lesson MD2-18, Pages 110-111, students engage in MP6: Attend to precision. In the lesson, students use straightedges to draw two lines of different lengths in their notebooks. The lines must be long enough for students to use their fingers to estimate.</p>
	<p><b>REQUIRED</b>  <b>6b)</b> Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics that is detailed in the content standards</p>	<p><b>Yes</b></p>	<p>Students are given opportunities throughout the materials to construct viable arguments and critique the reasoning of others around major grade-level concepts. For example, in Unit 3,</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	(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.		Lesson OA2-35, Pages 88-89, students use counting on to determine how many more one number is than another (2.OA.A.1). In the lesson, students have a chance to construct viable arguments and critique the reasoning of others when they are asked to write a sentence using "more than." Another example, in Unit 3, Lesson OA2-35, Pages 88-89, students use counting on to determine how many more one number is than another (2.OA.A.1). In the lesson, students are asked to write a sentence using "more than," which allows students the chance to construct viable arguments and critique the reasoning of others.
	<b>6c)</b> There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	<b>No</b>	While mathematical practices are identified in the materials, there are no teacher-directed materials that explain the role of the practice standards in the classroom or in the lessons. Within each lesson, mathematical practices are identified beside activities to note it is a place where the practice could be reinforced; however, there is no guidance on how to engage students in the practice or how the practice is demonstrated in the activity.
	<b>6d)</b> Materials explicitly attend to the specialized language of mathematics.	<b>Yes</b>	The materials attend to the specialized language of mathematics. In each lesson overview there is a section highlighting lesson vocabulary. Throughout the lessons, the vocabulary is used, and teachers are reminded in the lesson plans to use specific vocabulary. Teachers are

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>prompted in the lesson plans to explicitly teach the meaning of the words to students using examples and models. Students are encouraged to use the words as well as they learn to use precise language to explain their thinking. For example, the lesson vocabulary for Lesson OA2-2, Pages 3-4 includes add, addition sentence, altogether, equal sign (=), equals, plus sign (+), and zero (0) (2.OA.B.2). The terms are explicitly taught to students. The students engage in a hands-on activity where they use circles to make addition sentences. Teachers are prompted to encourage students to share their solutions using the vocabulary words they learned.</p>
<p><b>Additional Criterion</b>  <b>7. INDICATORS OF QUALITY:</b>  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.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>7a)</b> 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.</p>	<p><b>Yes</b></p>	<p>The materials provide students with opportunities to produce a variety of responses. Students are asked not only to produce answers, but also to provide evidence through drawings, representations, and written explanations. Students are often asked to analyze and defend the work of others. They must justify their conclusions with verbal statements and mathematical reasoning. For example, in Unit 1, Lesson OA2-6, Pages 11-13, students use their knowledge that all consecutive even numbers are an even number apart to discover that all non-consecutive even numbers are also an even number apart. Students are asked to use pictures, objects, or addition sentences to show their work. Another</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p><b>REQUIRED</b></p> <p><b>7b)</b> 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 student responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.</p>	Yes	<p>example, in Unit 1, Lesson OA2-8, Pages 17-19, students are asked to make at least two word problems using pictures and words (2.OA.A.1).</p> <p>Within the teacher manual, each lesson includes notes that support and reward teacher study. These notes provide, but are not limited to, guidance on lesson flow, sample high-quality questions for teachers to ask to elicit student thinking, discussion on ways to prompt students, sample student responses, and common misconceptions. For example, in Unit 1, Lesson OA2-8, in the Lesson Plan "NOTE" section, it states: There are two types of addition word problems in this lesson: "add to" problems and "put together" problems (for more details, search online for K-5 Progressions on Operations and Algebraic Thinking). "Add to" word problems appear on AP Book 2.1 p. 17, "put together" word problems appear on AP Book 2.1 p. 18, and both types of word problems appear on AP Book 2.1 p. 19. Do not refer to the types by name or explain how they differ, but do show examples of each. Another example, in Unit 7, Lesson MD2-6, in the Lesson Plan "NOTE" section it states that if you plan to do Activity 1, divide it into two parts. Have students complete the first part before recess, lunch, or another break in the day to allow time for fingerprints to dry.</p>
	<p><b>7c)</b> Support for English Language Learners and other special populations is thoughtful and helps those</p>	Yes	<p>Support for English Language Learners and other special populations is thoughtful and</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p>students meet the same standards as all other students. The language in which problems are posed is carefully considered.</p>		<p>helps those students meet the same standards as all other students. In addition to carefully introducing all mathematical vocabulary, the language is age appropriate and does not use specialized vocabulary that has not been taught. Suggested wording in lesson plans is intended to help ELL students by not assuming that they will have absorbed vocabulary outside of the classroom and that the challenge for them is mathematical or logical, not English comprehension.</p>
	<p><b>7d)</b> The underlying design of the materials distinguishes between problems and exercises. In essence the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.</p>	<p><b>Yes</b></p>	<p>The underlying design of the materials distinguishes between problems and exercises. JUMP Math resources provide a continuum of problem types from exercises to two-step problems (starting with simpler problems and more scaffolding and moving to more complex problems and less scaffolding) where students learn “in context” with a variety of “situational contexts/problem types.” In class, students are provided with exercises that allow them to practice what has just been taught as well as to extend it slightly through the use of bonus questions. These are clearly labeled as “Exercises” in the lesson plans. Extension questions at the ends of lesson plans are clearly intended as problems. In class Activities provide richer context and more independent exploration but can range from exercises to problems. The AP Books generally progress from exercises to</p>

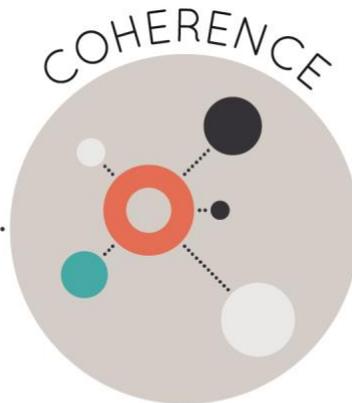
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			problems within a lesson. In all cases, the expectations of students are clearly spelled out.
	<p><b>7e)</b> Lessons are appropriately structured and scaffolded to support student mastery.</p>	<p><b>Yes</b></p>	<p>Lesson are appropriately structured and scaffolded to support student mastery. The outline of how each lesson flows is given by the bold in-line headers in the lesson plan. In a typical JUMP Math class, teachers present new material for approximately 3 minutes. Then students practice, giving teachers an opportunity to assess individual learning. The teacher can refine the lesson further, offering targeted scaffolding and further opportunity for assessment and practice before moving on. Once students have demonstrated that they have understood, teachers are encouraged to give them bonus questions (see TR 2.1 Introduction p. A-13) stretching their understanding before moving on by repeating the process with an incremental increase in the level of difficulty. Student understanding is further solidified and assessed through AP Book practice. (see "JUMP Math Lesson" in TR 2.1, p. A-19.)</p>
	<p><b>7f)</b> Materials support the uses of technology as called for in the Standards.</p>	<p><b>Yes</b></p>	<p>The LSSM for Grade 2 does not call for use of technology.</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<b>FINAL EVALUATION</b>			
<i>Tier 1 ratings</i> receive a “Yes” in Column 1 for Criteria 1 – 7.			
<i>Tier 2 ratings</i> 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.			
<i>Tier 3 ratings</i> receive a “No” in Column 1 for at least one of the non-negotiable criteria.			
<b>Compile the results for Sections I and II to make a final decision for the material under review.</b>			
Section	Criteria	Yes/No	Final Justification/Comments
<b>I: Non-Negotiables</b>	1. Focus on Major Work	Yes	A majority of the instructional time is spent on the major work, and content outside of the scope of the course is clearly noted to teachers.
	2. Consistent, Coherent Content	Yes	Materials connect supporting content to major content in meaningful ways. They also connect standards in different domains and clusters.
	3. Rigor and Balance	Yes	The materials devote a substantial amount of time to developing conceptual understanding, while also tending to the development of students' procedural skill and fluency as well as application.
	4. Focus and Coherence via Practice Standards	Yes	The practice standards are addressed in a way that enriches the major work of Grade 2.
<b>II: Additional Alignment Criteria and Indicators of Quality</b>	5. Alignment Criteria for Standards for Mathematical Content	Yes	The Standards for Mathematical Content are addressed in a way that enriches the major work of Grade 2.
	6. Alignment Criteria for Standards for Mathematical Practice	Yes	The Standards for Mathematical Practice are addressed in a way that enriches the major work of Grade 2.
	7. Indicators of Quality	Yes	Indicators of Quality are addressed in a way that enriches the major work of Grade 2.
FINAL DECISION FOR THIS MATERIAL: <b><u>Tier I, Exemplifies quality</u></b>			

Strong mathematics instruction contains the following elements:



Focus strongly where the standards focus.



Think across grades, and link to major topics within grades.



In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

Title: **JUMP Math**

Grade/Course: **3**

Publisher: **JUMP Math**

Copyright: **2014-2016**

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

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

STRONG	WEAK
1. Focus on Major Work (Non-Negotiable)	
2. Consistent, Coherent Content (Non-Negotiable)	
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	
5. Alignment Criteria for Stnds. for Math Content	
6. Alignment Criteria for Stnds. for Math Practice	
7. Indicators of Quality	

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

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

**Tier 1 ratings** receive a “Yes” in Column 1 for Criteria 1 – 7.

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

**Tier 3 ratings** receive a “No” in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<b>SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.</b>			
<p><b>Non-Negotiable</b>  <b>1. FOCUS ON MAJOR WORK<sup>7</sup>:</b>  Students and teachers using the materials as designed devote the large majority<sup>8</sup> of time to the major work of the grade/course.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>1a)</b> Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.</p>	<p><b>Yes</b></p>	<p>The majority of class time is devoted to the major work of Grade 3. According to the Annotated Contents in the teacher’s guide, there are 168 lessons in Grade 3. Of these lessons, according to the Annotated Contents, 71% of the lessons (120/168) focus on major content. For example, Unit 2: Fractions contains 18 lessons that align with major content Domain Number and Operations - Fractions. 13% of the lessons (22/168) focus on supporting content. For example, Unit 1: Shapes contains 9 lessons that align with supporting content Cluster 3.G.A. 15% of the lessons (26/168) focus on additional content. For example, Unit 2: Place Value, Addition, and Subtraction contains 15 lessons that align with additional standard Cluster 3.NBT.A.</p>
	<p><b>REQUIRED</b>  <b>1b)</b> In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment 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/course in which they are introduced in the Standards.</p>	<p><b>Yes</b></p>	<p>Lessons that focus on content outside of Grade 3 are annotated in the table of contents to show the alignment to the Grade 3 LSSM. Using this guidance, teachers will be able to maximize their time spent on grade level.</p>

<sup>7</sup> For more on the major work of the grade, see [Focus by Grade Level](#).

<sup>8</sup> 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%.

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<p><b>Non-Negotiable</b>  <b>2. CONSISTENT, COHERENT CONTENT</b>            Each course’s instructional materials are coherent and consistent with the content in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>2a)</b> Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.</p>	<p><b>Yes</b></p>	<p>The materials connect supporting standards to major standards in meaningful ways. For example, Unit 2 Lesson NF3-4: Fractions and Pattern Blocks aligns with major Standard 3.NF.A.1 and supporting Standard 3.G.A.2. In the lesson, students use pattern blocks to form various shapes and determine fractions of the whole. Unit 9 Lesson MD3-48: Picture Graphs effectively connects supporting Standard 3.MD.B.3 to major Standard 3.OA.A.3. In the lesson, students use multiplication and division to solve word problems relating to the given picture graphs. Incorporating mathematics from the major clusters into the work of the supporting clusters allows students to continue developing their understanding of major clusters even when the emphasis has shifted to supporting clusters and maintains the focus of math lesson on those major clusters as well as creating coherence throughout the year.</p>
	<p><b>REQUIRED</b>  <b>2b)</b> Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade/course, in cases where these connections are natural and important.</p>	<p><b>Yes</b></p>	<p>Materials include problems and activities that serve to connect two or more clusters in a domain and two or more standards from different domains. For example, in Unit 3 Lesson OA3-53, students apply properties of operations as strategies to multiply and divide (3.OA.B.5). This lesson also connects to standards in Cluster 3.OA.A because it requires students to interpret products of whole numbers (3.OA.A.1) and interpret whole number quotients of whole numbers (3.OA.A.2).</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Unit 4 Lesson NBT3-21: Adding to Make a 4-Digit Number aligns with Standard 3.OA.D.8 and Standard 3.NBT.A.1. In the lesson, students estimate their answers to word problems, effectively connecting standards from different domains.
<p><b>Non-Negotiable</b>  <b>3. RIGOR AND BALANCE:</b>  Each grade’s instructional materials reflect the balances in the Standards and help students meet the Standards’ rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>3a) Attention to Conceptual Understanding:</b> 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 discussion questions.</p>	<p><b>Yes</b></p>	Materials develop conceptual understanding of key mathematical concepts as required by the Standards. For example, Standard 3.NBT.A.3 requires students to demonstrate conceptual understanding of multiplying one-digit whole numbers by multiples of 10 in the range 10-90 using strategies based on place value and properties of operations. In Unit 4 Lesson NBT3-16, students are given the opportunity to multiply one-digit numbers by multiples of 10 using ten blocks and hundreds blocks to build concrete and pictorial models. In Unit 7 Lesson MD3-30, students are given the opportunity to measure areas of shapes in square inches by counting the number of square inches that cover the surface. This allows students to develop conceptual understanding of Standard 3.MD.C.6, which requires students measure areas by counting squares. In Lesson OA3-51, students develop conceptual understanding of Standard 3.OA.A.2, which requires students to interpret whole number quotients of whole numbers. In the lesson, students use drawings to write division equations and draw pictures of equal groups to match given division

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>equations. Through teacher questioning, students understand that, when dividing, either the group size or the number of groups can be unknown. They make connections between skip counting, arrays, and group pictures.</p>
	<p><b>REQUIRED</b>  <b>3b) Attention to Procedural Skill and Fluency:</b> 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.</p>	<p><b>Yes</b></p>	<p>Materials help students develop procedural skill and fluency of key mathematical concepts as required by the Standards. For example, Standard 3.OA.C.7 requires students to fluently multiply and divide within 100, and to know from memory all products of two one-digit numbers. According to the JUMP Math Correlations to Louisiana Standards for Grade 3, this standard is taught in 11 lessons in Book 1 and five lessons in Book 2.</p> <p>The methods and opportunities for building fluency with this program are consistent with the recommendations and examples provided in the progressions documents.</p>
	<p><b>REQUIRED</b>  <b>3c) Attention to Applications:</b> Materials are designed so that teachers and students spend sufficient time working with engaging applications, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/course, afford opportunities for practice, and engage students in problem solving. The problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are</p>	<p><b>Yes</b></p>	<p>There are opportunities for students to engage in applications that develop Grade 3 content. For example, Standard 3.OA.D.8 explicitly calls for application of the four operations to solve two-step word problems. Students are also expected to represent these problems with an equation with a letter to represent the unknown and to assess the reasonableness of their answers. According to the JUMP Math Correlations to Louisiana Standards</p>

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	explicit.		<p>for Grade 3, Unit 7 Lessons OA3-38-OA3-43 align with this standard.</p> <p>The approach for developing students' ability to engage in application is scaffolded, which may seem insufficient in the earlier Units.</p>
	<p><b>REQUIRED</b>  <b>3d) Balance:</b> The three aspects of rigor are not always treated together and are not always treated separately.</p>	Yes	<p>The three aspects of rigor are not always treated together and are not always treated separately. For example, Unit 7 Lessons MD3-30 teaches Standard 3.MD.C.6, which requires students to measure areas by counting unit squares. In the lesson, students build conceptual understanding of area as they physically cover rectangles with square inches. In the lesson following, students continue building conceptual understanding as they cover areas marked off on the floor with paper square feet. Then they begin to apply their understanding of area to word problems solved with the class. In Lesson MD3-32, students develop conceptual understanding of the relationship of area and multiplication (3.MD.C.7) by relating to what they know about arrays. The lesson also has some problems for students to practice building procedural skill with the standard. Conceptual understanding through the use of pictures is represented frequently in the lessons, both separately and in combination with procedural skill and sometimes application.</p>

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<p><b>Non-Negotiable</b>  <b>4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:</b>  Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>4a)</b> Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in both teacher and student materials.</p>	<p><b>Yes</b></p>	<p>The practice standards are addressed in a way that enriches the major work of Grade 3. Mathematical practices are found throughout lesson and in extensions of lessons. For example, Lesson OA3-3 has an activity for MP.5, use appropriate tools strategically. In the lesson, students are asked to find the gap between numbers by using number lines to count up or count backwards (3.OA.D.9). On the student workbook sheet for Lesson NF3-18, there are several problems that require students to engage in MP.3, which calls for students to construct viable arguments and critique the reasoning of others. Problem 2 shows two pictures of different sized-wholes, each with half shaded. The question asks, “Is one half of Picture A the same as one half of Picture B? Explain.” Problem 5 says, “Use the number lines to explain why <math>\frac{1}{3} = \frac{2}{6}</math>.” This helps students develop understanding of Standard 3.NF.A.3, which requires students to explain equivalence of fractions. On the student workbook sheet for Lesson MD3-32, students engage in MP.1, make sense of problems and persevere in solving them. First students find the area of rectangles by counting squares. Then they find the area of the same rectangles by multiplying. Problem 3 asks, “Did you get the same answers for Questions 1 and 2? Explain why the answers should be the same.” In Lesson OA3-19, students engage in MP.7, look for and make use of structure, as they use</p>

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			<p>what they know about numbers to help them skip count by 6s and solve 6s multiplication facts (3.OA.B.5). In the lesson, students learn to break up the next 6 they are adding to get to the next ten first, then add on the rest. So, for example, they think “<math>48 + 6 = 48 + 2 + 4 = 54</math>.”</p>
<b>SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY</b>			
<p><b>Additional Criterion</b>  <b>5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:</b>            Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>5a)</b> 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.</p>	<b>Yes</b>	<p>Materials provide all students extensive work with grade-level problems. Students solve grade-level problems during all parts of the lessons. For example, in-class exercises, activities, and grade appropriate problem solving questions, performance tasks and problem banks are included.</p>
<p><b>REQUIRED</b>  <b>5b)</b> 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.</p>	<b>Yes</b>	<p>Materials relate grade-level concepts explicitly to prior knowledge from earlier grades and extend to accommodate the new knowledge. Any prior knowledge that students need to understand the concepts taught in a lesson is reviewed at the beginning of the lesson. The prior knowledge required is also listed at the beginning of each lesson plan. For example, in Unit 2, Lesson NBT3-1, Pages 15-16, it states that the "Prior Knowledge Required" for the lesson is: Knows the number words one, ten, hundred and their corresponding numerals (1, 10, 100) in order for students to be able to identify the place value of digits in 2- and 3-digit numbers, and understand the value of the digits (3.NBT.A.2). Another example, in Lesson NBT3-2, Pages 17-19, it states that</p>	

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			the "Prior Knowledge Required" for the lesson is: Understands place value in order for students to be able to represent numbers with base ten materials (3.NBT.A.2).
	<b>5c)</b> Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.	<b>Yes</b>	The learning objectives in the materials are visibly shaped by the Standards. For example, the content objectives for Lesson OA3-4, Pages 6-7 states that students will extend number patterns made by subtracting a constant difference and students will also solve word problems involving number patterns made by subtracting. This objective is clearly shaped by the Standard 3.OA.D.9 (Solve problems involving the four operations, and identify and explain patterns in arithmetic). Another example, the content objectives for Lesson MD3-9, Pages 136-138, states that students will find area of rectangles by measuring and multiplying side lengths and students will solve problems involving finding area of rectangles. These objectives are clearly shaped by the Standard 3.MD.C.6 (Relate area to the operations of multiplication and addition).
	<b>5d)</b> Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.	<b>Yes</b>	Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. Coherence is evident in that the materials engage students in the components of rigor as required by the Standards. For example, in Unit 1, Lesson OA3-3, Pages 4-5, students are asked to find the differences between numbers by counting backward and by

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			<p>counting up. Students will use number lines to help with counting backward (3.OA.D.9). This standard calls for conceptual understanding. In the lesson, students are asked: "In order to get from 5 to 9, which number do we need to add to 5? (4) PROMPT: Count up from 5 to 9 using your fingers. Have students signal the answer. When students are holding up 4 fingers, write "+4" in the circle between 5 and 9 in part a). SAY: We write a plus sign (+) in front of the 4 to remind us that we're adding 4. ASK: In order to get from 9 down to 5, which number do we need to subtract from 9? Have all students count backward from 9 using their fingers. When students have 4 fingers raised, write "-4" in the circle between 9 and 5 in part b). SAY: We write a minus sign (-) in front of the 4 to remind us that we are subtracting. Coherence is evident throughout the materials, as connections are consistently made to what students have previously learned. Learning Progressions at the beginning of each Unit allow teachers to see how the new learning in the lesson is connected to what students have previously learned, as well as how it will connect to future learning.</p>
<p><b>Additional Criterion</b>  <b>6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:</b>          Aligned materials make meaningful and purposeful connections that</p>	<p><b>REQUIRED</b>  <b>6a)</b> Materials attend to the full meaning of each practice standard. 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</p>	<p><b>Yes</b></p>	<p>Materials attend to the full meaning of each practice standard. 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</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p>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.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p>develop the habits of mind described in the practice standard. Alignments to practice standards are accurate.</p>		<p>stimulate students to develop the habits of mind described in the practice standard. Alignments to practice standards are accurate. For example, in Unit 1, Lesson OA3-2, Pages 2-3, students engage in MP8 (Look for &amp; express regularity in repeated reasoning): After students have found the difference between 8 and 11, ask them what they think the next number will be after 11, if we keep adding 3 to each number. PROMPT: Draw a gap circle between 11 and the blank and ASK: What number should go in the circle: (3) Have the class add 3 to 11 to obtain 14, and write "14" in the blank. ASK: How did we figure out the next number would be 14? (added 3 to 11) SAY: Since we are adding 3 each time, we know how to find the next number. ASK: Is "2, 5, 8, 11" a number pattern? (yes) PROMPT: Do we know which number will come next? Demonstrate how to complete Part A) in the following exercises in the same matter." Another example, in Unit 1, Lesson OA3-4, Pages 6-7, students engage in MP2 (Reason abstractly &amp; quantitatively) when they are asked to extend the number pattern. Create a word problem that goes with the number pattern.</p>
	<p><b>REQUIRED</b>  <b>6b)</b> Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics that is detailed in the content standards</p>	<p><b>Yes</b></p>	<p>Students are given opportunities throughout the materials to construct viable arguments and critique the reasoning of others around major grade-level concepts. For example, in Unit 4,</p>

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	(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.		Lesson OA3-15, Pages 75-76, students are asked if a number can be even or odd and then explain their reasoning (3.OA.D.9). Another example, in Unit 4, Lesson OA3-19, Pages 82-83, students given the following problem to answer: "Jo started at 0 and skip counted by 3. All her numbers were even. Did she skip count correctly? How do you know?"
	<b>6c)</b> There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	<b>No</b>	While mathematical practices are identified in the materials, there are no teacher-directed materials that explain the role of the practice standards in the classroom or in the lessons. Within each lesson, mathematical practices are identified beside activities to note it is a place where the practice could be reinforced; however, there is no guidance on how to engage students in the practice or how the practice is demonstrated in the activity.
	<b>6d)</b> Materials explicitly attend to the specialized language of mathematics.	<b>Yes</b>	The materials attend to the specialized language of mathematics. In each lesson overview there is a section highlighting lesson vocabulary. Throughout the lessons, the vocabulary is used, and teachers are reminded in the lesson plans to use specific vocabulary. Teachers are prompted in the lesson plans to explicitly teach the meaning of the words to students using examples and models. Students are encouraged to use the words as well as they learn to use precise language to explain their thinking. For example, the lesson vocabulary for Lesson

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>OA3-11, Pages 64-66, are addend and addition sentence (3.OA.D.8). The terms are explicitly taught to students. The students engage in a hands-on activity where they use hand signals to signal the addends and the sums of a given problem. Teachers are prompted to encourage students to share their solutions using the vocabulary words they learned.</p>
<p><b>Additional Criterion</b>  <b>7. INDICATORS OF QUALITY:</b>  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.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>7a)</b> 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.</p>	<p><b>Yes</b></p>	<p>The materials provide students opportunities to produce a variety of responses. Students are asked not only to produce answers but to provide evidence through drawings, representations, and written explanations. Students are often asked to analyze and defend the work of others. They must justify their conclusions with verbal statements and mathematical reasoning. For example, in Unit 2, Lesson NBT3-3, Pages 20-21, students are asked to write the expanded form when given the numeral (3.NBT.A.2) and also show the base ten model drawing for a given numeral. Another example, in Unit 4, Lesson OA3-24, Pages 92-94, students are asked to model multiplication using arrays by drawing out the array using dots, draw an array using circles, and use counters or tiles to create different arrays.</p>
	<p><b>REQUIRED</b>  <b>7b)</b> 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</p>	<p><b>Yes</b></p>	<p>Within the teacher manual, each lesson includes notes that support and reward teacher study. These notes provide, but are not limited to, guidance on lesson flow, sample high-quality questions for teachers to ask to elicit student thinking,</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	ways of thinking and anticipating a variety of student responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.		discussion on ways to prompt students, sample student responses, and common misconceptions. For example, on Page A-42 in the Teacher's Guide for AP Grade 3, there is a section titled "NOTE" that states: "These exercises are related to the previous skills. Students may need more practice than is provided here. Create more exercises as needed. Assign the existing exercises as a test to ensure students have learned the material fully. Do not distribute these pages to students as they be intimidated by the number of questions and the size of the font. Write each exercise on the board as students work through them." Another example, on Page A-52 of the Teacher's Guide for AP Book 3, The Mental Math section has a section titled "NOTE" that states: "1. Make sure students know how to subtract (by counting on their fingers if necessary) before you teach them the trick for the nine times table. 2. Give a test on Step 1 before you move on."
	<b>7c)</b> 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.	<b>Yes</b>	Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. In addition to carefully introducing all mathematical vocabulary, the language is age appropriate and does not use specialized vocabulary that has not been taught. Suggested wording in lesson plans is intended to help ELL students by not assuming that they will have absorbed

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			vocabulary outside of the classroom and that the challenge is mathematical or logical, not English comprehension.
	<p><b>7d)</b> The underlying design of the materials distinguishes between problems and exercises. In essence the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.</p>	Yes	<p>The underlying design of the materials distinguishes between problems and exercises. JUMP Math resources provide a continuum of problem types from exercises to multi-step problems (starting with simpler problems and more scaffolding and moving to more complex problems and less scaffolding) where students learn “in context” with a variety of “situational contexts/problem types.” In class students are provided with exercises that allow them to practice what has just been taught as well as to extend it slightly through the use of bonus questions. These are clearly labeled as "Exercises" in the lesson plans. Problems in the "Problem Solving" lessons and problem banks are clearly intended as problems, as are extension question in lesson plans. In class Activities provide richer context and more independent exploration but can range from exercises to problems. The AP Book generally progress from exercises to problems within a lesson. In all cases, the expectations of students are clearly spelled out.</p>
	<p><b>7e)</b> Lessons are appropriately structured and scaffolded to support student mastery.</p>	Yes	<p>Lessons are appropriately structured and scaffolded to support student mastery. The outline of how each lesson flows is given by the bold in-line headers in the lesson plan. In a typical JUMP Math class, teachers present new material for</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			approximately 3 minutes. Then students practice, giving teachers an opportunity to assess individual learning. The teacher can refine the lesson further, offering targeted scaffolding and further opportunity for assessment and practice before moving on. Once students have demonstrated that they have understood, teachers are encouraged to give them bonus questions (see TR 3.1 Introduction p. A-13) stretching their understanding before moving on by repeating the process with an incremental increase in the level of difficulty. Student understanding is further solidified and assessed through AP Book practice. (see "JUMP Math Lesson" in TR 3.1, p. A-19.)
	7f) Materials support the uses of technology as called for in the Standards.	Yes	The LSSM for Grade 3 does not call for use of technology.

#### 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.**

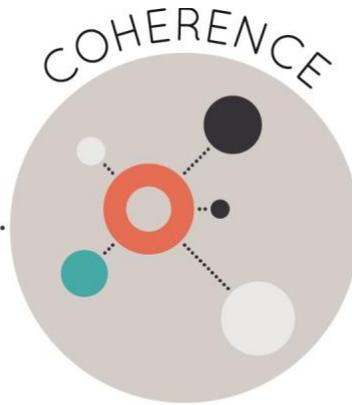
Section	Criteria	Yes/No	Final Justification/Comments
<b>I: Non-Negotiables</b>	1. Focus on Major Work	Yes	A majority of the instructional time is spent on the major work, and content outside of the scope of the course is clearly noted to teachers.
	2. Consistent, Coherent Content	Yes	The materials connect supporting content to major content in meaningful ways.
	3. Rigor and Balance	Yes	The materials devote a substantial amount of time to developing conceptual understanding, while also tending to the development of students’ procedural skill

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			and fluency as well as application.
	4. Focus and Coherence via Practice Standards	Yes	Mathematical Practices are evident throughout the materials.
<b>II: Additional Alignment Criteria and Indicators of Quality</b>	5. Alignment Criteria for Standards for Mathematical Content	Yes	The Standards for Mathematical Content are addressed in a way that enriches the major work of Grade 3
	6. Alignment Criteria for Standards for Mathematical Practice	Yes	The Standards for Mathematical Practice are addressed in a way that enriches the major work of Grade 3.
	7. Indicators of Quality	Yes	Indicators of Quality are addressed in a way that enriches the major work of Grade 3.
FINAL DECISION FOR THIS MATERIAL: <b><u>Tier I, Exemplifies quality</u></b>			

Strong mathematics instruction contains the following elements:



Focus strongly where the standards focus.



Think across grades, and link to major topics within grades.



In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

Title: **JUMP Math**

Grade/Course: **4**

Publisher: **JUMP Math**

Copyright: **2013-2016**

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

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

STRONG	WEAK
1. Focus on Major Work (Non-Negotiable)	
2. Consistent, Coherent Content (Non-Negotiable)	
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	
5. Alignment Criteria for Stnds. for Math Content	
6. Alignment Criteria for Stnds. for Math Practice	
7. Indicators of Quality	

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

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

**Tier 1 ratings** receive a “Yes” in Column 1 for Criteria 1 – 7.

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

**Tier 3 ratings** receive a “No” in Column 1 for at least one of the non-negotiable criteria.



CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<b>SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.</b>			
<p><b>Non-Negotiable</b> <b>1. FOCUS ON MAJOR WORK<sup>9</sup>:</b> Students and teachers using the materials as designed devote the large majority<sup>10</sup> of time to the major work of the grade/course.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b> <b>1a)</b> Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.</p> <p><b>REQUIRED</b> <b>1b)</b> In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment 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/course in which they are introduced in the Standards.</p>	<p>Yes</p> <p>Yes</p>	<p>The majority of class time is devoted to the major work of Grade 4. 115 of the 132 on grade-level lessons, or 87%, are focused on the major work of the grade.</p> <p>Lessons that focus on content outside of Grade 4 are annotated in the table of contents to show the alignment to the Grade 4 LSSM. Using this guidance, teachers will be able to maximize their time spent on grade level.</p>
<p><b>Non-Negotiable</b> <b>2. CONSISTENT, COHERENT CONTENT</b> Each course’s instructional materials are coherent and consistent with the content in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b> <b>2a)</b> Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.</p>	<p>Yes</p>	<p>The materials connect supporting content to major content in meaningful ways. For example, Unit 8 Lesson MD4-32 ask students "How much taller than the Washington Monument is the Gateway Arch?" and "How many times as tall the White House is the Gateway Arch?" The support standard applied here is having students know relative sizes of measurement units within one system of units, including: ft., in., km., m., cm., kg., g., lb., oz., etc. (4.MD.A.1). It connects to major cluster Standard 4.OA.A.3 by solving</p>

<sup>9</sup> For more on the major work of the grade, see [Focus by Grade Level](#).

<sup>10</sup> 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%.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>multistep word problems posed with whole numbers and having whole-numbers answers using the four operations. In Unit 2 Lesson NBT4-26, Problem 5 asks, "92 kids attend a play on 4 buses. There are an equal number of kids on each bus. a) How many kids are on each bus? and b) A ticket for the play costs \$6. How much will it cost for one busload of kids to attend the play?" This question applies to supporting content Standard 4.MD.A.2, which requires students to use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money. It connects to the major Standard 4.OA.A.3 , which requires students to solve multistep word problems posed with whole numbers and having whole-number answers using the four operations. Incorporating mathematics from the major clusters into the work of the supporting clusters allows students to continue developing their understanding of major clusters even when the emphasis has shifted to supporting clusters and maintains the focus of math lesson on those major clusters as well as creating coherence throughout the year.</p>
	<p><b>REQUIRED</b>  <b>2b)</b> Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade/course, in cases where these connections are natural and important.</p>	<p><b>Yes</b></p>	<p>Materials include problems and activities that serve to connect two or more clusters in a domain. For example, in Part 2 Unit 2 Lesson 43 students have to find the whole number quotients and remainders with up to four-digit dividends and one-digit divisors (4.NBT.B.6). This lesson connects to a major</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>standard in the same domain because in the extension, students are taught to estimate to use numbers that are easy to divide mentally, which allows them to use place value understanding to round multi-digit whole numbers (4.NBT.A.3). An example where two or more domains are connected is Lesson OA4-41. In the lesson, students are finding all factor pairs of a given whole number within 100 (4.OA.B.4) by using long division (4.NBT.B.6).</p>
<p><b>Non-Negotiable</b>  <b>3. RIGOR AND BALANCE:</b>  Each grade’s instructional materials reflect the balances in the Standards and help students meet the Standards’ rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>3a) Attention to Conceptual Understanding:</b> 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 discussion questions.</p>	<p><b>Yes</b></p>	<p>The materials develop conceptual understanding of key mathematical concepts, especially where called for in the Standards. For example, in Unit 4 Lesson NF4-11, students add and subtract fractions using pictures and by decomposing given fractions into unit fractions, thus building their conceptual understanding of 4.NF.B.3. In Unit 7 Lesson NF4-21, students use pictures to express a fraction with denominator 10 as an equivalent fraction with denominator 100 and to compare tenths to hundredths by reasoning about their size, developing conceptual understanding of 4.NF.C.5 and 4.NF.C.7. In Lesson G4-9, students develop conceptual understanding of Standard 4.G.A.3, which requires students to understand, identify, and draw lines of symmetry. In the lesson, the teacher instructs the students to fold a square in a way as to match up one vertex with any other vertex on the square. Through discussion, students realize the two parts created by the fold are equal,</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>which means the line is a line of symmetry. Students also explore lines of symmetry using a regular rectangular sheet of paper. Lesson NBT4-43 builds conceptual understanding of Standard 4.NBT.B.6, which requires students to find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. In the lesson, students relate division and place value. For example, they use base ten blocks to model 6 divided by 2, 60 divided by 2, and 600 divided by 2. Then they use unit form to divide, such as 6 tens divided by 2 is 3 tens and 6 hundredths divided by 2 is 3 hundredths, just like 6 ones divided by 2 is 3 ones.</p>
	<p><b>REQUIRED</b>  <b>3b) Attention to Procedural Skill and Fluency:</b> 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.</p>	<p><b>Yes</b></p>	<p>The materials develop procedural skill and fluency of key mathematical concepts as required by the Standards. For example, Standard 4.NBT.B.4 requires students to fluently add and subtract multi-digit whole numbers, with sums less than or equal to 1,000,000, using the standard algorithm. According to the JUMP Math Correlations to Louisiana Standards for Grade 4, this standard is taught in eight lessons in the materials.</p> <p>The methods and opportunities for building fluency with this program are consistent with the recommendations and examples provided in the progressions documents.</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p><b>REQUIRED</b>  <b>3c) Attention to Applications:</b> Materials are designed so that teachers and students spend sufficient time working with engaging applications, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/course, afford opportunities for practice, and engage students in problem solving. The problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit.</p>	Yes	<p>There are opportunities for students to engage in applications that develop Grade 4 content. For example, standard 4.OA.A.3 also calls for application, as it requires students to solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. It also requires students represent problems using equations with a variable to represent the unknown and assess the reasonableness of their answers. According to the JUMP Math Correlations to Louisiana Standards for Grade 4, there are several lessons that contain prerequisite material for Standard 4.OA.A.3, and this standard is taught in 6 lessons throughout the materials.</p> <p>The approach for developing students' ability to engage in application is scaffolded, which may seem insufficient in the earlier Units.</p>
	<p><b>REQUIRED</b>  <b>3d) Balance:</b> The three aspects of rigor are not always treated together and are not always treated separately.</p>	Yes	<p>The three aspects of rigor are not always treated together and are not always treated separately. For example, in Lesson NF4-11, students are given the opportunity to develop conceptual understanding of adding and subtracting fractions through using pictures and by decomposing given addends into unit fractions. Following this development, students are given some exercises to build procedural skill with adding and subtracting fractions. Finally, students apply the skill of adding and</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>subtracting fractions to solving word problems. In Lesson OA4-30, students engage in application of 4.OA.A.2 as they multiply or divide to solve word problems involving multiplicative comparison. Students also build conceptual understanding of multiplicative comparison through the use of tape diagrams.</p>
<p><b>Non-Negotiable</b>  <b>4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:</b>  Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>4a)</b> Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in both teacher and student materials.</p>	<p><b>Yes</b></p>	<p>The practice standards are addressed in a way that enriches the major work of Grade 4. Mathematical practices are found throughout lessons and in extensions of lessons. For example, students apply MP.2, reason abstractly and quantitatively, when they understand how much a given unit represents. In Lesson MD4-23, students are asked to think about whether a liter of water would be enough for different activities (4.MD.A.1). Students apply MP.4, model with mathematics, when they use mathematical objects to represent a real-world situation. In Lesson MD4-15, students use timelines to find elapsed time in real-world contexts (4.MD.A.2). Students engage in MP.3, construct viable arguments and critique the reasoning of others on the student workbook sheet for Lesson NF4-7. Problem 6 states, “Lina thinks <math>\frac{4}{3}</math> is less than <math>\frac{99}{100}</math> because the numbers are smaller. Is she right? Explain how you know.” (4.NF.A.2) Students have to analyze Lina’s reasoning, understand it, and then critique it. The student workbook sheet for Lesson NF4-9 has a problem that engages students in MP.1, make sense of problems</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			and persevere in solving them. Problem 3 on this page shows two incorrect models and one correct model of comparing $\frac{1}{2}$ and $\frac{3}{5}$ . The question asks which picture can be used to compare $\frac{1}{2}$ and $\frac{3}{5}$ (4.NF.A.2). Then students must explain why the other pictures cannot be used. Problem 6 on this page asks, "Can $\frac{1}{4}$ of one pie be bigger than $\frac{1}{2}$ of another pie? Show your thinking with a picture." (4.NF.A.2).
<b>SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY</b>			
<p><b>Additional Criterion</b>  <b>5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:</b>  Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>5a)</b> 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.</p>	<p><b>Yes</b></p>	<p>Materials provide all students extensive work with grade-level problems. Course-level problems are found in the lessons which feature an individual lesson plan for each topic, BlackLine Masters (extra worksheets, games, manipulatives, etc.), SMARTboard interactive lessons, Assessment and Practice Book assignments, and unit quizzes and tests. For example, in the Teacher Edition Lesson OA4-4 Pattern Rules (4.OA.C.5), students are given 16 problems to practice the content. In the Assessment and Practice book for the same lesson, students are given 44 problems to practice after the teacher's lesson.</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p><b>REQUIRED</b></p> <p><b>5b)</b> 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.</p>	<p><b>Yes</b></p>	<p>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. The beginning of each lesson in the Teacher Edition features a section entitled "Prior Knowledge Required." Here, the mathematical concepts that students should have previously mastered are listed. For example, Lesson NF 4-12 states that students should already be able to name proper fractions and can draw pictures to show proper fractions. This then leads to the new knowledge to be acquired by the students.</p>
	<p><b>5c)</b> Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.</p>	<p><b>Yes</b></p>	<p>Learning objectives align directly to LSSM cluster headings. Each lesson features a goal that identifies the expected outcome. For example, the goal of Lesson NBT 4-20 states the following: "Students will subtract with regrouping using base ten materials and using the standard algorithm...". This aligns to standard 4.NBT.B.4 which states that students will "fluently add and subtract multi-digit whole numbers, with sums less than or equal to 1,000,000, using the standard algorithm."</p>
	<p><b>5d)</b> Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.</p>	<p><b>Yes</b></p>	<p>Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. Coherence is evident throughout the materials, as connections are consistently made to what</p>

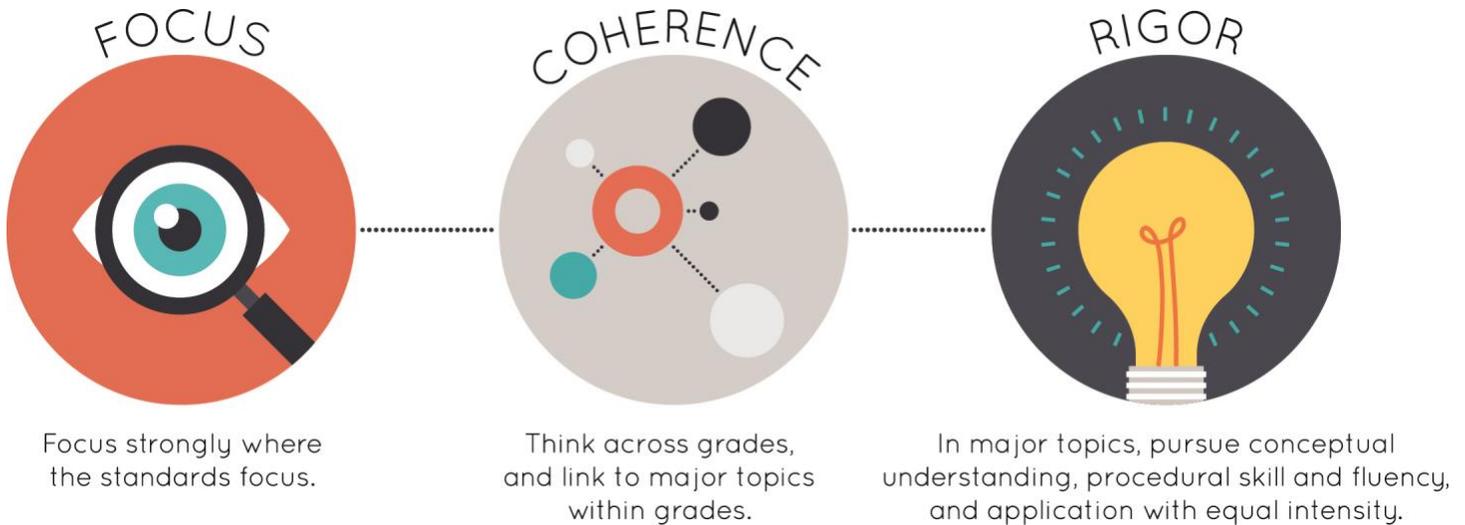
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			students have previously learned. In each unit introduction, the materials explain how the new learning connects with what students have previously learned and how the learning will progress throughout the unit.
<p><b>Additional Criterion</b>  <b>6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:</b>            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.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>6a)</b> Materials attend to the full meaning of each practice standard. 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. Alignments to practice standards are accurate.</p>	<b>Yes</b>	Mathematical practice standards are accurately identified in the lessons and are present throughout the materials. For example, in Lesson MD 4-16, students are to engage in MP.7 (Look for and make use of structure) as they convert between weeks and days in the given table. In Lesson NF 4-8, students are to use MP.1 (Make sense of problems and persevere in solving them.) and MP.3 (Reason abstractly and quantitatively) in the first extension problem. Here, they must compare fractions using different denominators and justify their reasoning.
	<p><b>REQUIRED</b>  <b>6b)</b> Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others 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.</p>	<b>Yes</b>	Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics, especially in the problem-solving of multi-step problems. On page 1 of the the AP Book 4-2, question 2 asks students to to explain how are all multiples of 8 are even. In addition, question 3 asks students to analyze another student's skip counting and explain the error.
	<p><b>6c)</b> There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.</p>	<b>No</b>	While mathematical practices are identified in the materials, there are no teacher-directed materials that explain the role of the practice standards in the classroom or

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			in the lessons. Within each lesson, mathematical practices are identified beside activities to note it is a place where the practice could be reinforced; however, there is no guidance on how to engage students in the practice or how the practice is demonstrated in the activity.
	6d) Materials explicitly attend to the specialized language of mathematics.	Yes	Materials explicitly attend to the specialized language of mathematics. Each lesson features a vocabulary section, and the words/phrases are discussed in detail throughout the lesson.
<b>Additional Criterion</b> <b>7. INDICATORS OF QUALITY:</b> 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.  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>REQUIRED</b> <b>7a)</b> There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.	Yes	There is variety in what students produce. On question 6 on the Unit 3 test, students must use a number line to explain why 496 is rounded to 500 when rounding to the nearest ten. On question 1 of the Unit 4 test, students must perform multiplication problems fluently. On the Unit 5 quiz, students must use diagrams to illustrate division.
	<b>REQUIRED</b> <b>7b)</b> 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 student responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	Yes	There are separate teacher materials that support and reward teacher study. In the Teacher Edition under the heading "Covering the Common Core State Standards with JUMP Math," teachers are provided with the organizational format of the lessons (lesson plan, assessment and practice materials, and extensions of the lesson), pacing of the lessons, and research on how to attend to complex concepts and problem-solving techniques.
	<b>7c)</b> Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students.	Yes	Support for English Language Learners and other special populations is thoughtful and helps those students meet the same

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	The language in which problems are posed is carefully considered.		standards as all other students. In addition to carefully introducing all mathematical vocabulary, the language is age appropriate and does not use specialized vocabulary that has not been taught. Suggested wording in lesson plans is intended to help ELL students by not assuming that they will have absorbed vocabulary outside of the classroom and that the challenge is mathematical or logical, not English comprehension.
	<b>7d)</b> 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.	<b>Yes</b>	The underlying design of the materials distinguishes between problems and exercises. Throughout the lessons, exercises, problems, and extensions are clearly labeled to indicate their purpose. Exercises allow opportunities for students to practice their newly learned skills. Problems allow opportunities for more in-depth solving skills to be honed. Extension questions provide opportunities for more conceptual foundations to be solidified. In addition, the Assessment and Practice books for students provide a variety of such problem types.
	<b>7e)</b> Lessons are appropriately structured and scaffolded to support student mastery.	<b>Yes</b>	Lessons are appropriately structured and scaffolded to support student mastery. For example, Lesson NBT 4-31 "Using Doubles to Multiply" emphasizes third grade standard 3.OA.B.5 as students move on through Lessons NBT 4-39 progressing to 4.NBT.B.5, building on their prior knowledge of multiplication to the mastery of the concept.
	<b>7f)</b> Materials support the uses of technology as called for	<b>Yes</b>	Although none of the Standards explicitly

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	in the Standards.		require the use of technology, the materials support the uses of technology through interactive SMART-board lessons.
<b>FINAL EVALUATION</b>			
<i>Tier 1 ratings</i> receive a “Yes” in Column 1 for Criteria 1 – 7.			
<i>Tier 2 ratings</i> 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.			
<i>Tier 3 ratings</i> receive a “No” in Column 1 for at least one of the non-negotiable criteria.			
<b>Compile the results for Sections I and II to make a final decision for the material under review.</b>			
Section	Criteria	Yes/No	Final Justification/Comments
<b>I: Non-Negotiables</b>	1. Focus on Major Work	Yes	A majority of the instructional time is spent on the major work, and content outside of the scope of the course is clearly noted to teachers.
	2. Consistent, Coherent Content	Yes	The materials connect supporting content to major content in meaningful ways.
	3. Rigor and Balance	Yes	The materials devote a substantial amount of time to developing conceptual understanding while also tending to the development of students’ procedural skill and fluency as well as application.
	4. Focus and Coherence via Practice Standards	Yes	Mathematical Practices are evident throughout the materials.
<b>II: Additional Alignment Criteria and Indicators of Quality</b>	5. Alignment Criteria for Standards for Mathematical Content	Yes	The materials are consistent with the progressions in the Standards.
	6. Alignment Criteria for Standards for Mathematical Practice	Yes	The materials make purposeful connections between the practice standards and the content standards.
	7. Indicators of Quality	Yes	The materials give teachers and students the tools they need to meet the expectations of the Standards.
FINAL DECISION FOR THIS MATERIAL: <b>Tier I, Exemplifies quality</b>			

Strong mathematics instruction contains the following elements:



Title: **JUMP Math**

Grade/Course: **5**

Publisher: **JUMP Math**

Copyright: **2013- 2016**

Overall Rating **Tier I, Exemplifies quality**

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

STRONG	WEAK
1. Focus on Major Work (Non-Negotiable)	
2. Consistent, Coherent Content (Non-Negotiable)	
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	
5. Alignment Criteria for Stnds. for Math Content	
6. Alignment Criteria for Stnds. for Math Practice	
7. Indicators of Quality	

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

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

**Tier 1 ratings** receive a “Yes” in Column 1 for Criteria 1 – 7.

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

**Tier 3 ratings** receive a “No” in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<b>SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.</b>			
<p><b>Non-Negotiable</b>  <b>1. FOCUS ON MAJOR WORK<sup>11</sup>:</b>            Students and teachers using the materials as designed devote the large majority<sup>12</sup> of time to the major work of the grade/course.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>1a)</b> Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.</p> <p><b>REQUIRED</b>  <b>1b)</b> In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment 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/course in which they are introduced in the Standards.</p>	<p>Yes</p> <p>Yes</p>	<p>The majority of class time is devoted to the major work of Grade 5. 100 of the 136 on grade-level lessons, or 74%, are focused on the major work of the grade.</p> <p>Lessons that focus on content outside of Grade 5 are annotated in the table of contents to show the alignment to the Grade 5 LSSM. Using this guidance, teachers will be able to maximize their time spent on grade level</p>
<p><b>Non-Negotiable</b>  <b>2. CONSISTENT, COHERENT CONTENT</b>            Each course's instructional materials are coherent and consistent with the content in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>2a)</b> Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.</p>	<p>Yes</p>	<p>The materials connect supporting content to major content in meaningful ways. For example, Unit 7 Lesson MD5-7 asks students to identify how many times larger or smaller a new unit is than the given unit and then to convert, such as 1.6mm to cm. This effectively connects supporting Standard 5.MD.A.1, which requires students to convert among different-sized standard measurement units, to major Standard 5.NBT.A.1, which requires students to recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to</p>

<sup>11</sup> For more on the major work of the grade, see [Focus by Grade Level](#).

<sup>12</sup> 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%.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>its right and <math>\frac{1}{10}</math> of what it represents in the place to its left. Unit 5 Lesson MD5-18 incorporates addition of fractions with a line plot. The major content standard associated with this lesson is 5.NF.A.1, which requires students to add and subtract fraction with unlike denominators. The supporting cluster standard that connects to it is 5.MD.B.2, which requires students to make a line plot to display a data set of measurements in fractions of a unit (<math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{8}</math>) and to solve problems using the data. Incorporating mathematics from the major clusters into the work of the supporting clusters allows students to continue developing their understanding of major clusters even when the emphasis has shifted to supporting clusters and maintains the focus of math lesson on those major clusters as well as creating coherence throughout the year.</p>
	<p><b>REQUIRED</b>  <b>2b)</b> Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade/course, in cases where these connections are natural and important.</p>	<p><b>Yes</b></p>	<p>Materials include problems and activities that serve to connect two or more clusters in a domain or two or more domains. For example, Unit 1 Lesson G5-2 connects the Numbers and Operations in Base Ten Domain and the Geometry Domain. In the lesson, students plot points on a coordinate grid, including decimal numbers. This connects Standard 5.G.A.1, which</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>requires students to plot points in a coordinate grid, and Standard 5.NBT.A.3, which requires students to read, write, and compare decimals to thousandths. Lesson G5-5 connects the Operations and Algebraic Thinking Domain and the Geometry Domain. In the lesson, students create sequences of numbers following given rules. Then they create ordered pairs using two sequences and graph the ordered pairs on a coordinate grid. Students look for patterns in the ordered pairs. This connects Standard 5.G.A.1 and Standard 5.OA.A.3, which requires students to generate two numerical patterns using given rules and identify relationships between the corresponding terms.</p>
<p><b>Non-Negotiable</b>  <b>3. RIGOR AND BALANCE:</b>  Each grade’s instructional materials reflect the balances in the Standards and help students meet the Standards’ rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>3a) Attention to Conceptual Understanding:</b>  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 discussion questions.</p>	<p>Yes</p>	<p>The materials develop conceptual understanding of key mathematical concepts, especially where called for in the Standards. For example, Unit 3 Lesson OA5-9 teaches Standard 5.OA.A.2, which requires students to write simple expressions that record calculations with whole numbers, fractions, and decimals, and interpret numerical expressions without evaluating them. Students also get practice with writing word problems as mathematical expressions. In Unit 5 Lesson NF5-13, students develop conceptual understanding of Standard</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>5.NF.A.1, which requires students to add and subtract fractions with unlike denominators. In the lesson, students are challenged to use what they know about adding and subtracting fractions with like denominators to figure out a way to add and subtract fractions with unlike denominators. Students learn to replace fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. Lesson NBT5-59 builds conceptual understanding of part of Standard 5.NBT.B.7, which requires students to add, subtract, multiply, and divide decimals using concrete models or drawings or strategies based on place value. In the lesson, students model division of decimals by whole numbers with base ten blocks as well as plastic money.</p>
	<p><b>REQUIRED</b>  <b>3b) Attention to Procedural Skill and Fluency:</b> 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.</p>	<p>Yes</p>	<p>There are opportunities within the materials for students to develop the procedural skill and fluency as required by the Standards. For example, Standard 5.NBT.B.5 requires students to develop fluency with multiplying multi-digit whole numbers using the standard algorithm. According to the JUMP Math Correlations to Louisiana Standards for Grade 5, this standard is taught in the following lessons: NBT5-13; 14 NBT5-15 to 24, 26; NBT5-54, 56, 57; MD5-11, 14,</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>16, 17; and MD5-35.</p> <p>The methods and opportunities for building fluency with this program are consistent with the recommendations and examples provided in the progressions documents.</p>
	<p><b>REQUIRED</b>  <b>3c) Attention to Applications:</b> Materials are designed so that teachers and students spend sufficient time working with engaging applications, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/course, afford opportunities for practice, and engage students in problem solving. The problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit.</p>	<p><b>Yes</b></p>	<p>There are opportunities for students to engage in applications that develop Grade 5 content. Standard 5.NF.B.3 explicitly calls for application, as it requires students to interpret fractions as division of the numerator by the denominator and to solve word problems where this is the case. According to the JUMP Math Correlations to Louisiana Standards for Grade 5, this standard is taught in 7 lessons in the materials.</p> <p>The approach for developing students' ability to engage in application is scaffolded, which may seem insufficient in the earlier Units.</p>
	<p><b>REQUIRED</b>  <b>3d) Balance:</b> The three aspects of rigor are not always treated together and are not always treated separately.</p>	<p><b>Yes</b></p>	<p>The three aspects of rigor are not always treated together and are not always treated separately. For example, in Unit 6 Lesson MD5-31 students have to show how to divide the whole shape into rectangular prisms and then find the total volume of the shape (5.MD.C.5c). This standard covers all three components of rigor: conceptual</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>understanding, procedural and fluency, and application. Another example is in Unit 5 Lesson MD5-12. Students have to convert the measurement from yards to feet, which requires them to write the answer as a proper fraction or as a mixed number. This applies to standard of interpret division of a whole number by a unit fraction, and compute such quotients (5.NF.B.7b). This standard covers conceptual understanding and procedural skill.</p>
<p><b>Non-Negotiable</b>  <b>4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:</b>  Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>4a)</b> Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in both teacher and student materials.</p>	<p><b>Yes</b></p>	<p>The practice standards are addressed in a way that enriches the major work of Grade 5. Mathematical practices are found throughout lessons and in extensions of lessons. For example, students engage in MP.7, which requires them to look for and make use of structure, when they use what they already know to solve problems. In Unit 7 Lesson MD5-4, students convert between centimeters and meters. They compare what they already know about money to meters and centimeters (5.MD.A.1). Students apply MP.6, attend to precision, when they state the meaning of symbols and specify units of measure. In Unit 6 Lesson MD5-30, students include the units in their answers when finding the missing length or width of a rectangle (5.MD.C.5). On the student workbook sheet for Lesson NF5-12, students</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			engage in MP.3, construct viable arguments and critique the reasoning of others. Problem 10 states, “Shondra says she reduced 12/18 to lowest terms by dividing the numerator and denominator by 2. What mistake did she make? Explain.” (5.NF.A.1).
<b>SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY</b>			
<p><b>Additional Criterion</b>  <b>5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:</b>  Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>5a)</b> 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.</p>	<p><b>Yes</b></p>	<p>Materials provide all students extensive work with grade-level problems. Course-level problems are found in the lessons which feature an individual lesson plan for each topic, BlackLine Masters (extra worksheets, games, manipulatives, etc.), SMARTboard interactive lessons, Assessment and Practice Book assignments, and unit quizzes and tests. For example, in the Teacher Edition Lesson NF 5-6 Adding and Subtracting Fractions (Introduction) (5.NF.A.1, 5.NF.A.2), students are given various problems to practice the content. In the Assessment and Practice book for the same lesson, students are given additional problems to practice after the teacher's lesson.</p>
	<p><b>REQUIRED</b>  <b>5b)</b> 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.</p>	<p><b>Yes</b></p>	<p>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. The beginning of each</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>lesson in the Teacher Edition features a section entitled "Prior Knowledge Required". Here, the mathematical concepts that students should have previously mastered are listed. For example, Lesson NBT 5-20 states that students should already be able to multiply a 2-digit number by a 1-digit number using the standard algorithm. This then leads to the new knowledge to be acquired by the students.</p>
	<p><b>5c)</b> Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.</p>	<p><b>Yes</b></p>	<p>Learning objectives align directly to LSSM cluster headings. Each lesson features a goal that identifies the expected outcome. For example, the goal of Lesson NF 5-6 states the following: "Students will add and subtract fractions with different denominators." This aligns to standard 5.NF.A.1 which states the students will "add and subtract fractions with unlike denominators (including mixed numbers)."</p>
	<p><b>5d)</b> Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.</p>	<p><b>Yes</b></p>	<p>Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. Coherence is evident throughout the materials, as connections are consistently made to what students have previously learned. In each unit introduction, the materials explain how the new learning connects with what students have previously learned and how the learning will progress</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			throughout the unit.
<p><b>Additional Criterion</b>  <b>6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:</b>            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.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>6a)</b> Materials attend to the full meaning of each practice standard. 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. Alignments to practice standards are accurate.</p>	Yes	Mathematical practice standards are accurately identified in the lessons and are present throughout the materials. For example, in Lesson NBT 5-21, students are to engage in MP.1 (Make sense of problems and persevere in solving them.) as they solve word problems in Extension 1. In Lesson NBT 5-23, students are to engage in MP.5 (Attend to precision.) as they divide the rectangle into portions to illustrate $45 \times 32$ .
	<p><b>REQUIRED</b>  <b>6b)</b> Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others 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.</p>	Yes	Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics, especially in the problem-solving of multi-step problems. On page 18 of the the AP Book 5-1, question 8 asks students to use diagrams and numbers to support whether a student can build a model given a specific amount of number blocks. In addition, question 1 on page 94 asks students to explain which fraction is greater.
	<p><b>6c)</b> There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.</p>	No	While mathematical practices are identified in the materials, there are no teacher-directed materials that explain the role of the practice standards in the classroom or in the lessons. Within each lesson, mathematical practices are

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>identified beside activities to note it is a place where the practice could be reinforced; however, there is no guidance on how to engage students in the practice or how the practice is demonstrated in the activity.</p>
	<p><b>6d)</b> Materials explicitly attend to the specialized language of mathematics.</p>	<p><b>Yes</b></p>	<p>Materials explicitly attend to the specialized language of mathematics. Each lesson features a vocabulary section, and the words/phrases are discussed in detail throughout the lesson.</p>
<p><b>Additional Criterion</b>  <b>7. INDICATORS OF QUALITY:</b>  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.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>7a)</b> 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.</p>	<p><b>Yes</b></p>	<p>There is variety in what students produce. On question 4 on the Unit 2 Quiz (Lessons 1 to 3), students must arrange the numbers from least to greatest. On question 8 on the Unit 3 test, students must complete the T-table.</p> <p>On question 4 part a on the Unit 5 Quiz (Lessons 12 to 15), students must explain why dividing the numerator and denominator by 4 will not result in the lowest terms.</p>
	<p><b>REQUIRED</b>  <b>7b)</b> 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 student responses,</p>	<p><b>Yes</b></p>	<p>There are separate teacher materials that support and reward teacher study. In the Teacher Edition under the heading "Covering the Common Core State Standards with JUMP Math," teachers are provided with the organizational format of the lessons (lesson plan, assessment and practice</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.		materials, and extensions of the lesson), pacing of the lessons, and research on how to attend to complex concepts and problem-solving techniques.
	<b>7c)</b> Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. The language in which problems are posed is carefully considered.	Yes	Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. In addition to carefully introducing all mathematical vocabulary, the language is age appropriate and does not use specialized vocabulary that has not been taught. Suggested wording in lesson plans is intended to help ELL students by not assuming that they will have absorbed vocabulary outside of the classroom and that the challenge is mathematical or logical, not English comprehension.
	<b>7d)</b> The underlying design of the materials distinguishes between problems and exercises. In essence the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.	Yes	The underlying design of the materials distinguishes between problems and exercises. Throughout the lessons, exercises, problems, and extensions are clearly labeled to indicate their purpose. Exercises allow opportunities for students to practice their newly learned skills. Problems allow opportunities for more in-depth solving skills to be honed. Extension questions provide opportunities for more conceptual foundations to be solidified. In addition, the Assessment and

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Practice books for students provide a variety of such problem types.
	<b>7e)</b> Lessons are appropriately structured and scaffolded to support student mastery.	<b>Yes</b>	Lessons are appropriately structured and scaffolded to support student mastery. For example, Lesson OA 5-1 through 5-3 prepares students for Lesson OA 5-4 through OA 5-5 (5.OA.B.3) as they build on the foundational knowledge of sequences.
	<b>7f)</b> Materials support the uses of technology as called for in the Standards.	<b>Yes</b>	Although none of the Standards explicitly require the use of technology, the materials support the uses of technology through interactive SMART-board lessons.

#### 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
<b>I: Non-Negotiables</b>	1. Focus on Major Work	<b>Yes</b>	Majority of the instructional time is spent on the major work, and content outside of the scope of the course is clearly noted to teachers.
	2. Consistent, Coherent Content	<b>Yes</b>	The materials connect supporting content to major content in meaningful ways.
	3. Rigor and Balance	<b>Yes</b>	The materials devote a substantial amount of time to developing conceptual understanding while also tending to the development of students procedural skill and fluency as well as application.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	4. Focus and Coherence via Practice Standards	Yes	Mathematical Practices are evident throughout the materials.
<b>II: Additional Alignment Criteria and Indicators of Quality</b>	5. Alignment Criteria for Standards for Mathematical Content	Yes	The materials are consistent with the progressions in the Standards.
	6. Alignment Criteria for Standards for Mathematical Practice	Yes	The materials make purposeful connections between the practice standards and the content standards.
	7. Indicators of Quality	Yes	The materials give teachers and students the tools they need to meet the expectations of the Standards.
FINAL DECISION FOR THIS MATERIAL: <b>Tier I, Exemplifies quality</b>			

Appendix I.

Publisher Response

The publisher had no response.

Appendix II.

Public Comments

There were no public comments submitted.