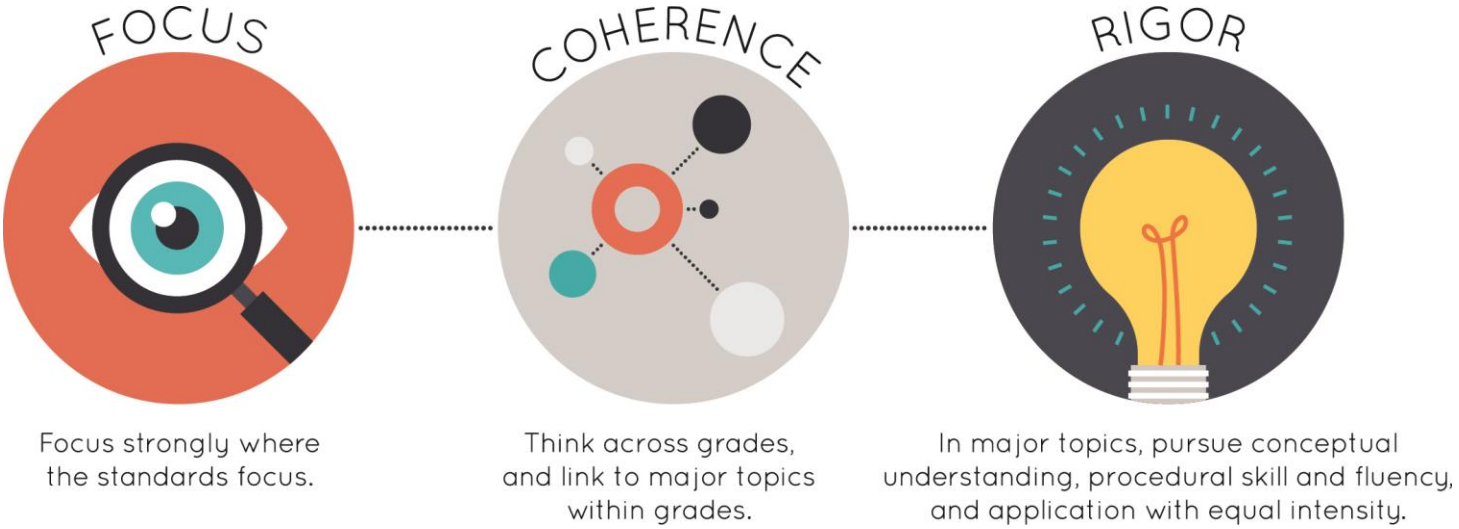
Instructional Materials Evaluation Review for Alignment in Mathematics Grades K – 12 (IMET)

FULL CURRICULUM
Instructional Materials

Strong mathematics instruction contains the following elements:



Title: **Math+Blue, Green, and Orange Summit LA** Grade/Course: **K-2**

Publisher: **K12 Inc.** Copyright: **2019**

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 and Coherence via Practice Standards (Non-negotiable)	
5. Alignment Criteria for Standards for Mathematical Content	
6. Alignment Criteria for Standards for Mathematical Practice	
7. Indicators of Quality	

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

Tier 1 ratings 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.

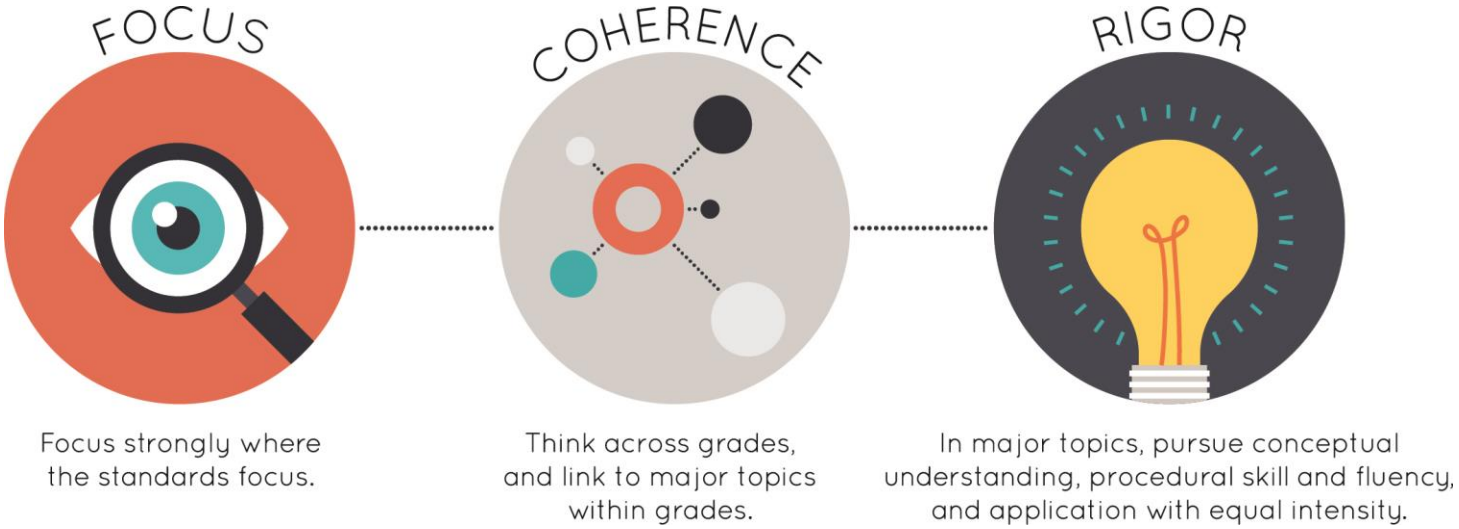
Click below for complete grade-level reviews:

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

Instructional Materials Evaluation Tool for Alignment in Mathematics Grades K – 12 (IMET)

FULL CURRICULUM
Instructional Materials

Strong mathematics instruction contains the following elements:



Title: **Math+Blue Summit LA**

Grade/Course: **K**

Publisher: **K12 Inc.**

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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 and Coherence via Practice Standards (Non-negotiable)	
5. Alignment Criteria for Standards for Mathematical Content	
6. Alignment Criteria for Standards for Mathematical Practice	
7. Indicators of Quality	

To evaluate instructional materials for alignment with the standards and determine tiered rating, begin with **Section I: Non-negotiable Criteria**.

- Review the **required**[1] Indicators of Superior Quality for each **Non-negotiable** criterion.
- If there is a "Yes" for all **required** Indicators of Superior Quality, materials receive a "Yes" for that **Non-negotiable** Criterion.
- If there is a "No" for any of the **required** Indicators of Superior Quality, materials receive a "No" for that **Non-negotiable** Criterion.
- Materials must meet **Non-negotiable** Criterion 1 and 2 for the review to continue to **Non-negotiable** Criteria 3 and 4. Materials must meet all of the **Non-negotiable** Criteria 1-4 in order for the review to continue to Section II.
- If materials receive a "No" for any **Non-negotiable** Criterion, a rating of Tier 3 is assigned, and the review does not continue.

If all Non-negotiable Criteria are met, then continue to **Section II: Additional Criteria of Superior Quality.**

- Review the **required** Indicators of Superior Quality for each criterion.
- If there is a "Yes" for all **required** Indicators of Superior Quality, then the materials receive a "Yes" for the additional criteria.
- If there is a "No" for any **required** Indicator of Superior Quality, then the materials receive a "No" for the additional criteria.

Tier 1 ratings receive a "Yes" for all Non-negotiable Criteria and a "Yes" for each of the Additional Criteria of Superior Quality.
Tier 2 ratings receive a "Yes" for all Non-negotiable Criteria, but at least one "No" for the Additional Criteria of Superior Quality.
Tier 3 ratings receive a "No" for at least one of the Non-negotiable Criteria.

[1] **Required Indicators of Superior Quality** are labeled "**Required**" and shaded yellow. Remaining indicators that are shaded white are included to provide additional information to aid in material selection and do not affect tiered rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Section I: Non-negotiable Criteria of Superior Quality **Materials must meet all of the Non-negotiable Criteria 1-4 in order for the review to continue to Section II.**			
Non-negotiable **1. FOCUS ON MAJOR WORK[2]:** Students and teachers using the materials as designed devote the large majority[3] of time to the major work of the grade/course. ☒ Yes ☐ No	**Required** **1a)** 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.	**Yes**	Materials devote a large majority of time to the major work of the grade. In the materials, 93% of the lessons are focused on major content standards for Grade K. Specifically, 77% of the lessons focus on major standards alone, 16% of the lessons focus on a combination of major and supporting/additional standards, and 7% of the lessons focus on additional and/or supporting standards.
	Required **1b)** 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.	**Yes**	Materials spend minimal time on content outside of the appropriate grade level. In assessment materials, assessment components do not make students/teachers responsible for any topics before the grade in which they are introduced. Lessons within each unit focus on grade-level standards without deviating to content outside of the grade level. Quizzes, unit reviews, and unit checkpoints all provide on-grade level learning based on the content standards of the lessons provided in the units. For example, Unit 3, Lessons 1-7, focus on LSSM K.CC.B.4. In Unit 3, Lessons 1 and 2, students learn how to count through 10.

[2] For more on the major work of the grade, see Focus by Grade Level.
[3] 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
			Students then represent amounts through 10 in Lessons 3 and 4. In Lessons 5 and 6, students represent amounts through 19 and count aloud through 10. In Unit 7, Lesson 3, the quiz includes questions such as, "Use the 8 circles in the bag to show 8 bugs in the grass. 2 bugs flew away, so now there are 6 bugs in the grass. Show how many bugs flew away" (LSSM K.OA.A.1, K.OA.A.5, K.CC.B.4b). In Unit 11, students learn to recognize and solve story problems in which two quantities are combined or compared and in which one quantity changes through addition or subtraction. In Unit 11, Unit Checkpoint, students solve problems such as, "Talya had 4 crayons. Her friend gave her 5 more crayons. How many crayons does Talya have now?" (LSSM K.OA.A.1, K.OA.A.2).
Non-negotiable **2. CONSISTENT, COHERENT CONTENT** Each course's instructional materials are coherent and consistent with the content in the Standards. ☒ Yes ☐ No	**Required** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Students gradually build an understanding of counting and cardinality throughout the materials. For example, major LSSM K.CC.B.5 is developed and then reinforced over the course of several units, such as Units 1, 4, 5, 7, 9, 12, 14, 15, and 16. In Unit 1, Lesson 9, students use blocks to determine whether shapes are the same or different (supporting LSSM K.G.B.4). During the lesson, students are provided a scattered group of circles, rectangles, squares, and triangles. Students first sort the shapes in

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			bins, count the number of shapes in each bin, and then determine which bin has the most shapes, connecting to major LSSM K.CC.B.5b and K.CC.C.6. In Unit 12, Lesson 6, students identify and state the value of a penny, nickel, dime, and quarter. They also count the number of coins in a group and write how many of a given coin are in a group connecting supporting LSSM K.MD.C.4 to major LSSM K.CC.A.3 and LSSM K.CC.B.5. Then, in Unit 14, Lesson 4, students explore attributes of shapes (supporting LSSM K.MD.B.3). During the lesson, students are asked to find how many baseballs are the same size. Students first analyze the size of each baseball and then count how many baseballs are the same size, connecting back to major LSSM K.CC.B.5. In Unit 14, Lesson 10, students take apart plane figures to create two or more different shapes. Then they draw lines to show how a shape can be separated to make two or more different shapes. Finally, students practice separating shapes to make new shapes and count to answer "how many" connecting supporting LSSM K.G.B.4 to major LSSM K.CC.B.5.
	Required **2b)** 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.	**Yes**	Materials include problems and activities that connect two or more clusters in a domain and/or two or more domains in the grade level where these connections are natural and important. For example, Unit 1, Lesson 5 connects clusters A (Know number names and the count sequence)

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			and B (Count to tell the number of objects) of the Counting and Cardinality (CC) domain. During the lesson, students learn to write numerals through 5 (LSSM K.CC.A.3). Students connect the number of objects with the number word and the written number each time they write the numerals connecting to LSSM K.CC.B.4. Unit 4, Lesson 11, connects the Number and Operations in Base Ten (NBT) and Counting and Cardinality (CC) domains. During the lesson, students first trace numbers 1-20, and then represent the numbers 1-20 by painting them with finger paints. Students also engage in a Count and Write activity in which they count objects and write the number to show how many objects are in each group applying place value concepts developed in the prior lesson (LSSM K.NBT.A.1 K.CC.A.3). Unit 5, Lesson 5 connects the Operations and Algebraic Thinking (OA) and Counting and Cardinality (CC) domains. During the lessons, students model addition using a number line made of yarn and index cards. They start at four and count on six more numbers using the number line. Students then use the model to answer the question "What is the sum of 4 and 6?" (LSSM K.CC.A.2, K.OA.A.1).
Non-negotiable **3. RIGOR AND BALANCE:** Each grade's instructional materials reflect the balances in the Standards and help students meet	**Required** **3a) *Attention to Conceptual Understanding:*** Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply	**Yes**	Materials develop conceptual understanding of key mathematical concepts for Grade K. The materials provide students the opportunity to develop conceptual understanding of key

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application. ☒ Yes ☐ No	featuring high-quality conceptual problems and discussion questions.		mathematical concepts over the course of the units. In Unit 3, Lesson 10, students learn to compare groups of objects using the words more, fewer, or equal. Students begin by matching red blocks with blue blocks and discover that the color red has one more block than the color blue. Students then count the number of red blocks and blue blocks to understand that 6 is more than 5 because there are more red blocks than blue blocks. Students continue to build the concept of comparing and use terminology such as greater than and less than using pictures in Lesson 11. Later in Lesson 12, students extend this learning as they compare groups when presented with written numerals (LSSM K.CC.C.7). In Unit 4, Lesson 6, students decompose numbers less than or equal to 10 into pairs using more than one way (LSSM K.OA.A.3). Students use objects or drawings, then record each decomposition by a drawing or equation. During the lesson, students start with circle blocks. Students place the circle blocks in the workspace depending on the number the teacher calls out. Students continue to demonstrate amounts 1-30. Next, students use red cubes and blue cubes to demonstrate the amount the teacher tells them. For example, when the teacher tells the students to represent 5, students use 2 red cubes and 3 blue cubes. Students then use 1 red cube and 4 blue cubes. Students

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			make a train of 5 green cubes and compare all 3 sets of cubes to see that each time there were 5 cubes. Students do this several times with different numbers. Lastly, students draw shapes to represent numbers. Students draw 3 blue stars + 3 red stars. Students state there is a plus sign in the picture building conceptual understanding of addition sentences. Students then draw 4 red stars + 1 blue star + 1 yellow star. Students notice that each time there are 6 stars. Students continue with different examples using other shapes such as dots. This understanding is extended in Unit 5, Lesson 4, as students use a number line to add using the count on strategy. Students first watch a video that demonstrates moving along a number line to add. The associated number sentence is displayed with the number line. They recognize that beginning with 3 and counting on 2 will equal the same sum as beginning at 2 and counting on 3 (LSSM K.OA.A.1). Students then apply this learning as they use a number line to add numbers during the Try It portion of the lesson.
	Required **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency	**Yes**	Materials are designed so that students attain the fluencies and procedural skills required by the standards for Grade K. Students have the opportunity to practice fluency in the Skills Update section of each digital lesson. In addition, students engage in fluency games to reinforce and practice addition and subtraction throughout the

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	standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.		materials. These activities are embedded within daily lessons. Students play the games in order to progress to the next stage of the lesson. In Kindergarten, students are required to fluently add and subtract within 5 (LSSM K.OA.A.5). Unit 5 allows students several opportunities to practice adding within 5. Throughout the unit students add within 5 using various strategies such as combining to add, counting on, and adding with models and sketches. Students answer questions such as "There are 2 blue blocks and 1 red block. How many blocks in total?" As the unit progresses, students build number sentences based on the problem to find the total. Then, in Lesson 14, students engage in a Play with Counting activity in which they practice fluently adding numbers within 5 (LSSM K.OA.A.5). In Unit 7, students continue building fluency and procedural skills as they use objects, pictures, and number lines to subtract within 5 (LSSM K.OA.A.5). In addition, students build other fluency skills such as writing numbers from 0 to 20 (LSSM K.CC.A.3). Practice with this skill is embedded throughout the lessons. In Unit 7, Lesson 11, students are given number sentences such as "7 take away 3" and use items in groups of 10 to help them solve the problem. Students draw circles, recording how they used the items to solve 7 take away 3 (LSSM K.CC.B.5b). In the Teacher's Guide, the fluency standards

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			that are embedded in the units are listed under the Fluency section. For example, Unit 4 focuses on building fluency in writing numbers 0 to 20 (LSSM K.CC.A.3). In Lessons 4, 11, 12, and 13 students practice writing numbers 0 to 20. In Lessons 11 and 13, attention is given to the correct formation of each numeral. In the lessons, students practice labeling sets with a written numeral with the goal of writing numerals 0–20 accurately, confidently, and quickly.
	Required **3c) *Attention to Applications:*** 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.	**Yes**	Materials are designed so that students spend sufficient time working with engaging applications. LSSM K.OA.A.2 is the only application standard for Kindergarten in which students are expected to solve addition and subtraction word problems, and add and subtract within 10 by using objects or drawings to represent the problem. The materials provide multiple opportunities for students to engage with this standard after they have developed an understanding of counting, adding, and subtracting. LSSM K.OA.A.2 is first addressed in Unit 6 and then again in Units 8-11 and Unit 15. In Unit 6, Lesson 9, students learn about story problems in which the total is given and they solve for a missing part. For example, students solve the following problem, “Bror has a wagon that is supposed to have 4 wheels, but the wagon has only 3 wheels. How many wheels is the wagon missing?”

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			Students subtract within 10 to find how many wheels the wagon is missing. Students are also encouraged to apply the count on strategy to this problem to solve. In Unit 8, Lesson 8, students recognize whether a story problem is an addition problem or a subtraction problem. Students model to solve the problem. For example, students solve the following problem, "There are 13 rolls in a basket. 9 rolls were eaten at lunch. How many rolls were left in the basket?" Students first decide to add or subtract to find how many rolls are left. Students apply their addition/subtraction strategies of drawing a picture and taking away or adding items as necessary. In Unit 11, Lesson 1, students solve different types of story problems. They learn to read a problem, explain what is happening, and decide whether they should add or subtract to solve it. In Unit 11, Lesson 5, students solve two different types of story problems: compare problems and combine problems. For example, students solve the following problem, "Yubo wrote 9 stories. Cate wrote 3 fewer stories than Yubo. How many stories did Cate write? Cate wrote _____ stories."
	Required **3d)** ***Balance:*** The three aspects of rigor are not always treated together and are not always treated separately.	**Yes**	It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately. A majority of the standards for Kindergarten focus on conceptual understanding. The balance of rigor is

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			apparent in the design of the materials as each lesson has multiple sections to develop Grade K standards. The three components of rigor can be found in different parts of the lesson. For example, in the Skills Update and Get Ready sections of the lessons, students have an opportunity to work with Grade K fluency standards. In Unit 8, Lesson 3, all three components of rigor are represented in the lesson. Students model subtraction story problems with objects and sketches. Within this lesson, students work on fluency practice in the Skills Update by selecting the answer that has the correct number of objects in a group when given a specific number between 1-10 (LSSM K.CC.B.5c). Students also count the number of dots in groups of circles and arrange them least to greatest number of dots. After the Skills Updates, students build conceptual understanding of subtraction by using cubes to model and solve a subtraction problem (LSSM K.OA.A.1). Students then apply this understanding as they solve word problems by modeling subtraction using objects and sketches (LSSM K.OA.A.2). The materials create a balance of rigor beginning in Units 1 to 4 as students build an understanding of the relationship between numbers and quantities (LSSM K.CC.B.4) and relate the number of objects counted by the last number counted (LSSM K.CC.B.4b). In Units 5 and 7,

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			students develop addition and subtraction strategies (LSSM K.OA.A.1). In Units 6 and 8, students apply counting strategies to add and subtract to solve word problems (LSSM K.OA.A.2). Throughout these units, students also have the opportunity to develop and then practice the fluency and procedural skills of adding and subtracting within 5 (LSSM K.OA.A.5).
Non-negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards. ☒ Yes ☐ No	**Required** **4a)** 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.	**Yes**	Materials address the practice standards in such a way to enrich the content standards of the grade. Every lesson in the materials includes at least one of the Standards for Mathematical Practice (MP) and most lessons include three or more of these standards. In mapping the practice standards, it is clear the number of mathematical practices increases as students progress from the opening to closing of each unit of study. The lessons follow a natural progression of increasing mathematical practices as the students' knowledge and skills develop over the course of the materials. A Unit Guide accompanies each unit and lists the practice standards that are addressed within each lesson of that unit. In the Unit Guide, Standards for Mathematical Practice are listed for the lesson. In addition, the guide breaks down each mathematical practice, explains how they are addressed in the unit, and provides examples in the Integration of Mathematical Practice Standards section of the guide. For example, in Unit 12,

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			Lesson 1, students compare lengths of objects with measurable attributes to see which object has more or less (LSSM K.MD.A.2) and describe measuring attributes of a single object (LSSM K.MD.A.1). In this lesson, students use cubes to carefully measure objects to determine which of two objects is longer, taller, or shorter. As students engage in the lesson, they use appropriate tools strategically (MP.5), attend to precision when measuring with the cubes (MP.6), and reason abstractly and quantitatively to decide which object is more or less (MP.2). In Unit 13, Lesson 5, students use counting strategies to count to 100 by ones and by tens (LSSM K.CC.A.1) and beginning from a given number within a known sequence, count forward (LSSM K.CC.A.2). In this lesson, students use a hundreds chart (MP.5) to learn to count by ones to 100. They look for patterns (MP.8) in numbers in order to recognize the similarities and differences between numbers 51-59, 61 - 69, 71-79, etc. In Unit 4, Lesson 6, students identify different ways to show a number (LSSM K.OA.A.3). In this lesson, students use linking cubes (MP.4) to show the number 9 in two different ways. Students persevere (MP.1) as they use cubes to make a train and determine different ways to represent 9, such as 5 red and 4 blue, or 2 yellow and 7 green (MP.2).
Section II: Additional Criteria of Superior Quality			

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: 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. ☒ Yes ☐ No	**Required** **5a)** 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.	**Yes**	Materials provide all students extensive work with grade-level problems. Students solve grade-level problems in each lesson within the materials. The lessons are broken into several sessions with options for additional practice in a printed version. The materials provide students the opportunity to work with problems in a variety of formats to integrate and extend concepts and skills. A Math Plus Blue Activity book is included in the materials and provides the opportunity for students to work on grade-level problems throughout each unit. Each of the problems associated in the activity book are aligned with the lesson being taught. Students also have access to skills sheets required for each lesson of the unit. For example in Unit 3, Lessons 10 and 11 include 22 problems for students to solve in the Learn It and Try It sections. An interactive quiz is also available in which students compare groups of objects using the words more, fewer, and equal. Students answer questions such as, “A red plate has 6 carrots. A blue plate has 3 cucumbers. Draw a picture to find which plate has more vegetables” (LSSM K.CC.C.6). In Unit 4, Lesson 13, students trace the numbers 11 through 20 with a glue stick, yarn, and their finger. Then they write the numbers on handwriting paper. Students then write the numbers 11-20 on their own in the Try it section. Students

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			then have 4 questions to complete on an online quiz (LSSM K.CC.A.3).
	Required **5b)** 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.	**Yes**	Materials are designed so that students connect prior knowledge to new concepts learned in Kindergarten using concepts that are taught in a logical order and consistent with the progressions of the Standards. The materials are designed so that students connect prior knowledge to new concepts in the Get Ready section of the digital lesson. The materials build student understanding of concepts and skills taught throughout each unit. Students begin developing number sense in Unit 1 by understanding the relationship between numbers and quantities (LSSM K.CC.B.4). Students explore shapes in various sizes and colors, then use their knowledge of shapes and colors to help them make sense of and solve problems. This helps students understand the relationship between numbers and quantities. Students then learn to count aloud through 5 and write the numerals, recognizing that the numbers they say, and their written symbols, stand for a specific amount. Unit 3 builds on the concepts taught in Unit 1. Students learn how to count through 10, recognizing that each number is one more than the last. Students continue to make the connection between an amount, a numeral, and a number when comparing groups of sizes up to 10. Students also learn how to write numbers through 10.

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			Once students build their understanding of counting numbers and their relationship between the number of objects, students begin using the knowledge of numbers they have gained to count and answer the question "how many" (LSSM K.CC.B.5) in Unit 4, Lesson 1. Students count aloud to find the number of objects in a group. Throughout Unit 4, students represent numbers through 20 (LSSM K.CC.A.3) and use the knowledge of representing amounts to progress to comparing amounts represented by each group of objects. Units 5-11 build on students' number sense and students are introduced to addition and subtraction. To add and subtract, students understand how to count numbers in a group to build a number sentence to find the total or take away from the total.
	5c) Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.	**Yes**	Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards for Grade K. Objectives are listed for every lesson in the materials and reflect the intent and language of the standards. For example, the objective for Unit 14, Lesson 6, states that students will "identify the solid figure that does not belong in a group based on its color, shape, or size," reflecting the language and intent of LSSM K.G.B.4. In the lesson, students analyze shapes and their attributes to figure out which does not belong. For example, students are given 2 triangles and a square. Students

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			must decide which shape does not belong and tell why it does not belong. The objective for Unit 11, Lesson 3, states that students will "model or sketch to solve change and combine story problems," reflecting the language and intent of LSSM K.OA.A.1 In the lesson, students are given a story problem "Susan has 10 apples. She gave 5 apples to her neighbor. How many apples does Susan have now?" Students solve the problem and find a matching number sentence that will tell them how many apples Susan has. In Unit 12, Lesson 3, the objective states that students will "compare the capacity of different containers by finding which container holds more and which holds less. They will practice comparing capacity by filling pairs of containers with water and saying which holds more and which holds less. They then have the option of filling containers with other substances, for variety, such as flour, beans, or sand." The objectives reflect the language and intent of LSSM K.MD.A.1 and K.MD.A.2.
6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach	**Required** **6a)** 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.	**Yes**	Materials attend to the full meaning of each practice standard. The practice standards are evident in all lessons across the materials. The practice standards are listed in the Unit Guide for teachers next to the grade level standards for each lesson of the unit. The materials provide a connection between the practice standards and student objectives. For example, in Unit 4, Lesson 3, students

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
which are not included in the Standards. ☒ Yes ☐ No			attend to MP.4. Students learn how to represent numbers, such as 15, using cubes or circles. During the Try It activity, students draw 13 circles or 19 squares. Students then work towards solving problems such as, "Madison has 11 bananas. Draw shapes on the fruit plate to show all of her bananas." (LSSM K.CC.A.3 K.CC.B.5a-c). In Unit 15, Lesson 1, students use skills they have previously learned to create a numbers scrapbook. In the lesson, students write numbers 1-20, count objects from 1 to 20, decompose numbers, and solve addition and subtraction story problems (LSSM K.CC.B.5 and K.OA.A.4). During the lesson, students show numbers 1 through 5 by representing their amount using drawings or pictures (MP.4). They also use a ten frame (MP.5) to determine what number can be combined with each number(1-5) to make it to 10 (MP.2). In Unit 9, Lesson 10, students show their understanding of numbers and their quantities as they use craft sticks to model and solve story problems. They use abstract reasoning (MP.2) when they answer questions such as, "What does the number 2 show?" (LSSM K.CC.4.b K.CC.B.5c K.OA.A.1 K.OA.A.2 K.OA.A.5). There are also teacher guided questions in the Lesson Guide for the lesson, such as "There are 16 chickens near the barn. There are 10 sheep in a pen. How many fewer sheep are there than chickens?" or "Can you turn this story

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			problem into a number sentence?" These questions help students reflect on how they use abstract and quantitative reasoning (MP.2).
	Required **6b)** 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.	**Yes**	Materials provide opportunities for students to construct viable arguments and critique the arguments of others concerning key Grade K mathematics that is detailed in the content standards. Each lesson has a Try-Learn Routine. There are lessons embedded in each unit that allow students to discuss their solution strategies, explain and critique their reasoning. For example, in Unit 1, Lesson 7, students recognize and describe the characteristics of triangles, squares, and circles. Students explain how they know the plane figure is a triangle, square, or circle by the characteristics of the figure. For example, students know that the shape is a triangle based on the fact that the figure has 3 sides. In Unit 4, Lesson 10, using ten frames and addition sentences, students learn to recognize that numbers between 10 and 20 are made up of ten. Students are asked questions such as, "What number makes 10 ones and 4 more ones? How do you know?" In this lesson, students develop their math communication skills by discussing a new strategy of breaking up numbers between 11 and 19. They discuss how they would solve problems using this strategy. They explain what they have learned about numbers 11 to 19 and they explain their

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			reasoning when prompted. Students are asked the following questions to help them explain their thinking and respond to others: "How did you solve this problem? What steps did you take? Why did you do that?" In Unit 7, Lesson 10, students check solutions for subtraction problems to determine whether they are correct. Students work through the subtraction story problems using subtraction strategies they learned in the unit to find the correct answer. In Lesson 11, students construct viable arguments by explaining the strategies they use to solve subtraction problems. In this activity, students are instructed to use a variety of strategies to solve take-away problems, then they are prompted to reflect on the strategies. They discuss their preferred method for solving take-away problems and the specifics of how they solved a problem, then respond to a prompt about take-away problems in general.
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	**Yes**	Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. The Unit Guide lists and thoroughly explains the role of the practice standards utilized in each lesson within a unit. The Unit Guide also has a section titled "Integration of Mathematical Practice Standards." The Unit Guide dives deeper into the mathematical practices with a breakdown and examples of how each mathematical

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			practice is addressed in the units. The Unit Guide states, "These are the mathematical practice standards that are addressed in this unit with examples of how each standard is addressed." For example, the Unit Guide for Unit 10 provides examples of how the practices are utilized in the lessons. In Lesson 3 and 6, students model problems in a food court and at a picnic (MP.4). In Lesson 1, students use cubes and sketches to solve problems (MP.5). In Lesson 4, students use correct phrases, such as more than and fewer than, to compare quantities. In Lesson 6, students "recognize the patterns of compare problems to determine the correct way to approach the problems." (MP.7). The Lesson Guides also provide information on how the practices are utilized in the lessons. The Lesson Guide for Unit 12, Lesson 1, states that "Though it is not the only Standard for Mathematical Practice addressed in this lesson, the focus of this activity is MP.1." Guidance states that "In reviewing shape names, counting shape sides, and comparing shapes based on side numbers, students must integrate old and new terms as well as persevere in counting and comparison activities." The guide includes questions that the teacher can ask throughout the activity to help students make sense of counting sides of shapes, comparing shapes, and classifying shapes. For example, the teacher is prompted to ask, "How many shapes have

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			four sides? What are the shapes' names? Which shape that you worked with today has the fewest number of sides? The most?"
	6d) Materials explicitly attend to the specialized language of mathematics.	**Yes**	Materials explicitly attend to the specialized language of mathematics. The Unit Guides briefly details some of the vocabulary words under the Mathematical Practice Application column. In addition, some of the Lesson Guides include keywords for lesson vocabulary that will be used throughout the unit. During the interactive lessons, students can click on the highlighted vocabulary words to bring up the definition. For example, in Unit 5, Lesson 1, the Lesson Guide lists vocabulary words, such as add, addition, sum, and total, when introducing addition. In Unit 12, Lesson 2, words such as lighter, heavier, and weight are defined when students compare the weight of objects by finding which object is heavier or lighter. The teacher uses these words throughout the lesson and reviews them prior to the students starting their independent activity. The Lesson Guide for Unit 10, Lesson 1, provides the key terms and definitions for compare and take-away. In the lesson, students "take-away" from a group to determine how many objects are left in the group. In comparison problems, students compare two groups to determine how many more or fewer objects are in one group. In Unit 14, Lesson 1, students first review plane

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			figures and then are introduced to solid figures. The Lesson Guide provides the following guidance, "This lesson will use the term solid figures as well as the word solids to describe 3-dimensional figures. Reinforce both terms with students."
7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards. ☒ Yes ☐ No	**Required** **7a)** 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**	In the materials, students are asked to produce answers in a variety of ways. Students are asked to produce answers and solutions in arguments, explanations, diagrams, and other mathematical models. In Unit 3, Lesson 7, students use objects and drawings to represent amounts through 10. During the lesson, students draw an upside down U to represent a cave. Students use blocks to represent bears and put the correct number of bears in the cave as their digital lesson notes how many bears are in the cave. Next students use objects, such as dry macaroni, to count objects. Then students complete an activity page in which they draw the correct number of objects in a box and place the correct number of blocks in a box. Unit 13, Lesson 6, provides an assignment sheet for students to practice their addition and subtraction fluency within 5. Students use strategies, such as counting on or counting back, to solve each problem. The Unit 13 quiz is a one on one verbal assessment in which students begin at 1 and count up to 42, as well as skip count by 19 up to 50. Students also count and show 19 cubes correctly. In the Unit 5 checkpoint,

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			students use circular blocks to show the addition problem, 5 and 2. They show how they would add 4 circles and 5 circles to find the total. In Unit 8, Lesson 3, students fill in blanks with correct answers to questions, such as "Kara had 8 pencils. She broke 3 of them. How many pencils does Kara have now?" Students are encouraged to draw circles or sketches to help solve the problem. In Unit 11, Lesson 7 begins with a review of previous lessons with questions, such as, "Which group of circle blocks shows 5 + 3?" in which students choose the correct answer that models the problem. Later in the lesson, students read each story problem, and then watch movie A and movie B. Students choose the movie that best describes what is happening in the problem. Throughout the interactive lesson, students answer questions based on the story presented. Some questions use pictures while others have cubes. Students type the correct answer into the box. Students also complete the online lesson with an interactive multiple choice quiz.
	Required **7b)** 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	**Yes**	Materials provide separate teacher materials that support and reward teacher study. The materials provide teacher planning and guidance to support the instructional process. Digital teacher components are found in each unit. Each unit utilizes four tabs titled Lesson List, Materials, Advanced Prep, and Objectives. In the Lesson List tab, lessons are clickable

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	of desired mathematical behaviors being elicited among students.		and state whether an assessment is available for the lesson. In the Materials tab, the lesson is broken into required materials that the student, learning coach, and teacher can download or print. The Advanced Prep tab provides a pacing guide for each lesson and more explicit directives to effectively teach the lesson. The Objectives tab lists all objectives the lesson addresses. The Unit Guide provided for each unit lists lessons, standards, mathematical practices application, and graded assignments and assessments for each unit. Teaching notes are also documented in most of the Unit Guides. For example, the Unit 2 Unit Guide states, "The Kindergarten LSSM requires students to identify squares, circles, triangles, and rectangles. In this course, students will count the sides and corners of pentagons. This content is included for enrichment purposes only and will not be included on assessments." The guide details the fluency standards to be addressed within the unit and pinpoints difficult concepts. The guide includes a Supports for English Language Learners section and identifies resources provided within the unit. A Lesson Guide is also provided for each lesson in the materials that is broken into sections titled Prepare, Skills Update, Get Ready, Learn, and Try It, reflecting what will be taught in the student digital lesson for each part of the lesson. The Lesson Guide also includes the lesson objective,

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			materials needed, and lesson overview. In the Overview, activities within the lesson are labeled as online or offline to inform the teacher where students will be working during the lesson. Keywords for the lesson are also listed on the Lesson Guide.
	7c) 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**	Materials include support for English Learners and other special populations that are thoughtful and help those students meet the same standards as all other students. The materials utilize multiple visual tools within the lesson, such as number lines and charts, to help students understand mathematical processes. Each Unit Guide includes a Supports for English Language Learners section. For example, in Unit 12, the support English Learners consists of "visual support that provides students instruction without the need for strong reading comprehension or fluency." Teachers are encouraged to take advantage of videos wherever provided throughout the course. The guide also states that "Manipulatives, such as cubes, household objects, crayons, and other items students use to represent problems and concepts, will help English language learners develop their conceptual knowledge and vocabulary." In Unit 3, students learn how to count aloud through 10, recognizing that each number is one more than the last and express repeated reasoning. In Unit 3, Lesson 1, a

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			video with audio is used to help students learn to count through 10. Students play online counting games with audio in Unit 3, Lesson 6, to practice counting aloud through 10. Students follow along with a video that provides verbal and visual instructions on writing numbers through 10. Additional English Learner guidance states, "Throughout Unit 3, blocks, cubes, and drawings are used to help students learn to count groups of up to 10 objects and represent amounts through 10. Index cards labeled with numbers are used to help students make a visual connection between a numeral and an amount of objects."
	7d) 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. Each lesson follows a sequence of multiple digital sections. Students develop new mathematical knowledge in the Learn It sections and apply the newly learned mathematics in the Try It sections. Some lessons also have additional worksheets for practice. For example, in Unit 12, Lesson 5, students compare the length, weight, or capacity of two given objects. Students begin the lesson by comparing the length of household objects. Students are then presented with two objects, such as a paperclip and an eraser. Students predict which is longer. They are asked how they know. Students then compare weight and then capacity of certain objects. Students then apply the

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			new learning by completing an activity page. Students then take an online quiz measuring concepts learned in this lesson. In Unit 7, Lesson 6, students draw pictures to solve subtraction problems. Students first engage in an interactive lesson in which they take away objects, such as yellow peppers, based on instructions given. As students complete the interactive lesson, they also sketch models to represent the subtraction problems. Students learn to draw the total amount of objects, cross out how many are taken away, and then count the objects that are not crossed out to find how many are left. Students then complete an Assignment Sheet to apply the new learning. On the Assignment Sheet, students are provided with seven problems in which they draw a picture to show each subtraction problem and find the answer. For example, students solve “8 take away 3” by drawing 8 circles and then cross out 3. Students solve subtraction exercises to apply what they have learned from the lesson.
	7e) Lessons are appropriately structured and scaffolded to support student mastery.	**Yes**	Lessons are appropriately structured and scaffolded to support student mastery. Each lesson is constructed of multiple sections: Introduction, Skills Update, Learn, and Try It sections. The Get Ready portion of each lesson reviews prerequisite skills from the current grade to prepare students for the new skills. The Learn component of the lesson includes animated think aloud videos that walk

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			through new skills with students and includes teacher modeling and guided instruction; it also provides paper and pencil practice. Last, the Try It portion of the lesson allows students to move from learning into applying new knowledge. For example, in Unit 4, students write numerals through 20 and recall the connection between numerals, numbers, and amounts (LSSM K.CC.A.3 K.CC.B.5). This activity helps to prepare the student to fluently write numbers from 0 to 20. In Unit 5, Lesson 6, students learn to use a number line to add two numbers. First, students complete an activity in the Try It portion. In this activity, students practice adding on a number line by using blocks and complete an activity page from their Activity Book. Students use a number line and blocks to answer questions, such as "5+3.". Students then complete the Learn activity by solving the same types of problems but drawing circles (or other strategies learned) to add, if needed (LSSM K.CC.A.2 K.OA.A.1 K.OA.A.5). In Unit 6, Lesson 3, students learn how to solve an addition story problem by drawing, explaining, and, finally, solving the problem. Students are guided through the process of solving story problems with an activity page that includes three problems. Lastly, students complete the Try It portion of the lesson which allows students to work independently on

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			exercises to apply what they have learned in the lesson.
	7f) Materials support the uses of technology as called for in the Standards.	**N/A**	The LSSM does not call for use of technology for Grade K.
FINAL EVALUATION ***Tier 1 ratings*** receive a "Yes" for all Non-negotiable Criteria and a "Yes" for each of the Additional Criteria of Superior Quality. ***Tier 2 ratings*** receive a "Yes" for all Non-negotiable Criteria, but at least one "No" for the Additional Criteria of Superior Quality. ***Tier 3 ratings*** receive a "No" for at least one of the Non-negotiable Criteria.			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**
I: Non-negotiable Criteria of Superior Quality[4]	1. Focus on Major Work	**Yes**	Materials devote a larger majority of time to the major work of the grade. In the materials, 93% of the lessons are focused on major content standards for Grade K. Materials spend minimal time on content outside of Grade K. In assessment materials, assessment components do not make students/teachers responsible for any topics before the grade in which they are introduced.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Materials connect two or more clusters in a domain or two or more domains in Grade K.
	3. Rigor and Balance	**Yes**	Materials develop conceptual understanding of key mathematical concepts for Grade K. Materials are designed so that students attain the fluencies and procedural skills required by

[4] Must score a "Yes" for all Non-negotiable Criteria to receive a Tier I or Tier II rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			the Standards for Grade K. Materials are designed so that students spend sufficient time working with engaging applications for Grade K. It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately.
	4. Focus and Coherence via Practice Standards	**Yes**	Materials promote focus and coherence by connecting the practice standards with Grade K content.
II: Additional Criteria of Superior Quality[5]	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Materials provide all students extensive work with grade-level problems. Materials relate Grade K concepts explicitly to prior knowledge from earlier grades. Materials include learning objectives that are visibly shaped by LSSM cluster heading.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	Materials attend to the full meaning of each practice standard for Grade K. Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key Grade K mathematics that is detailed in the content standards. Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. Materials explicitly attend to the specialized language of mathematics.
	7. Indicators of Quality	**Yes**	In the materials, students are asked to produce answers in a variety of ways. Materials provide separate teacher materials that support and reward teacher

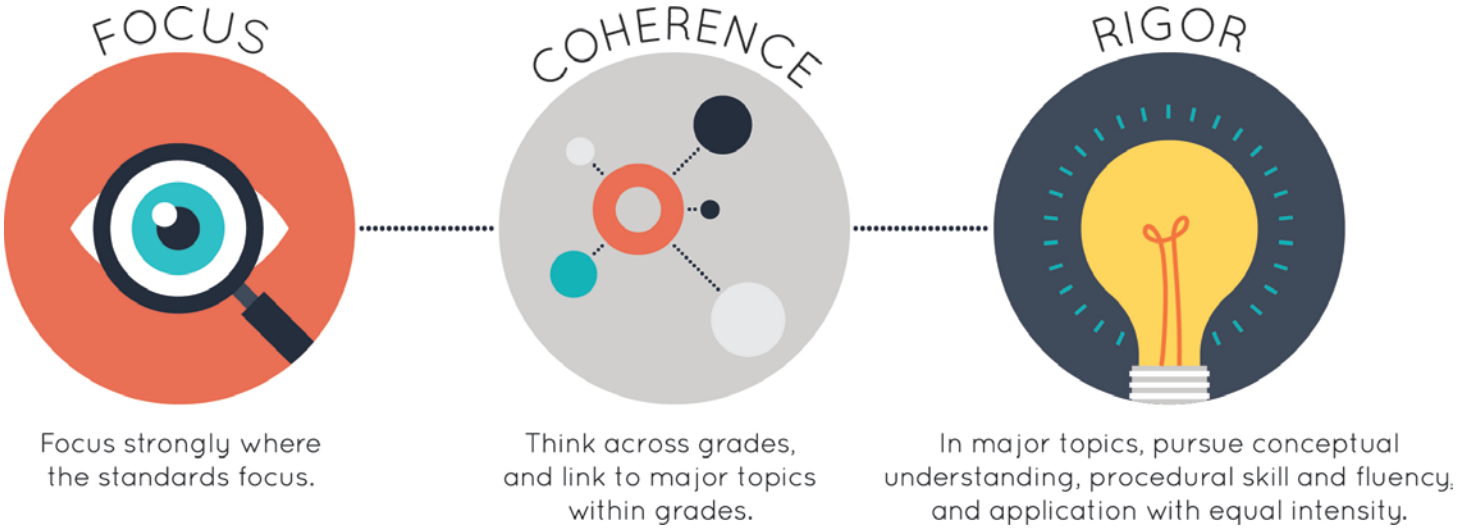
[5] Must score a "Yes" for all Additional Criteria of Superior Quality to receive a Tier I rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			study. The instructional materials provide teacher planning and guidance to support the instructional process. Materials include support for English Language Learners and other special populations that are thoughtful and help those students meet the same standards as all other students. The underlying design of the materials distinguishes between problems and exercises. Lessons are appropriately structured and scaffolded to support student mastery using a gradual release model.
FINAL DECISION FOR THIS MATERIAL: **Tier I, Exemplifies quality**			

Instructional Materials Evaluation Tool for Alignment in Mathematics Grades K – 12 (IMET)

FULL CURRICULUM
Instructional Materials

Strong mathematics instruction contains the following elements:



Title: **Math+Green Summit LA**

Grade/Course: **1**

Publisher: **K12 Inc.**

Copyright: **2019**

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 and Coherence via Practice Standards (Non-negotiable)	
5. Alignment Criteria for Standards for Mathematical Content	
6. Alignment Criteria for Standards for Mathematical Practice	
7. Indicators of Quality	

To evaluate instructional materials for alignment with the standards and determine tiered rating, begin with **Section I: Non-negotiable Criteria**.

- Review the **required**[1] Indicators of Superior Quality for each **Non-negotiable** criterion.
- If there is a "Yes" for all **required** Indicators of Superior Quality, materials receive a "Yes" for that **Non-negotiable** Criterion.
- If there is a "No" for any of the **required** Indicators of Superior Quality, materials receive a "No" for that **Non-negotiable** Criterion.
- Materials must meet **Non-negotiable** Criterion 1 and 2 for the review to continue to **Non-negotiable** Criteria 3 and 4. Materials must meet all of the **Non-negotiable** Criteria 1-4 in order for the review to continue to Section II.
- If materials receive a "No" for any **Non-negotiable** Criterion, a rating of Tier 3 is assigned, and the review does not continue.

If all Non-negotiable Criteria are met, then continue to **Section II: Additional Criteria of Superior Quality.**

- Review the **required** Indicators of Superior Quality for each criterion.
- If there is a "Yes" for all **required** Indicators of Superior Quality, then the materials receive a "Yes" for the additional criteria.
- If there is a "No" for any **required** Indicator of Superior Quality, then the materials receive a "No" for the additional criteria.

Tier 1 ratings receive a "Yes" for all Non-negotiable Criteria and a "Yes" for each of the Additional Criteria of Superior Quality.
Tier 2 ratings receive a "Yes" for all Non-negotiable Criteria, but at least one "No" for the Additional Criteria of Superior Quality.
Tier 3 ratings receive a "No" for at least one of the Non-negotiable Criteria.

[1] **Required Indicators of Superior Quality** are labeled "**Required**" and shaded yellow. Remaining indicators that are shaded white are included to provide additional information to aid in material selection and do not affect tiered rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Section I: Non-negotiable Criteria of Superior Quality **Materials must meet all of the Non-negotiable Criteria 1-4 in order for the review to continue to Section II.**			
Non-negotiable **1. FOCUS ON MAJOR WORK[2]:** Students and teachers using the materials as designed devote the large majority[3] of time to the major work of the grade/course. ☒ Yes ☐ No	**Required** **1a)** 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.	**Yes**	Materials devote a large majority of time to the major work of the grade. In the materials, 90% of the lessons are focused on major content standards for Grade 1. The major work for Grade 1 is focused on Operations and Algebraic Thinking (OA) and Number and Operations in Base Ten (NBT) of the Louisiana Student Standards for Mathematics (LSSM). An example of major work within the grade is found in Unit 5, Lesson 1; students are given a two-digit number and mentally find 10 more or 10 less than the number without having to count (LSSM 1.NBT.C.5). In Unit 8, Lesson 7, students add and subtract within 20, demonstrating fluency for addition and subtraction within 10, understand the meaning of the equal sign, and determine the unknown whole number in an addition or subtraction equation that relates three whole numbers (LSSM 1.OA.B.4, 1.OA.C.6, 1.OA.D.7, 1.OA.D.8).

[2] For more on the major work of the grade, see Focus by Grade Level.
[3] 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
	Required **1b)** 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.	**Yes**	Materials spend minimal time on content outside of the appropriate grade level. In assessment materials, assessment components do not make students/teachers responsible for any topics before the grade level in which they are introduced. For example, in Unit 3, Lesson 12, Unit Checkpoint Assessment, students use addition and subtraction within 20 to solve word problems, apply properties of operations to add and subtract, relate counting to addition and subtraction, understand the meaning of the equal sign, determine the unknown whole number in an addition or subtraction equation that relates three whole numbers, and add within 100 (LSSM 1.OA.A.1, 1.OA.C.5, 1.NBT.C.4.a, 1.OA.B.3, 1.OA.D.7, 1.OA.D.8, and 1.OA.C.6). In Unit 4, Lesson 7, Unit Checkpoint Assessment, students add and subtract within 20, demonstrating fluency for addition and subtraction within 10 (LSSM 1.OA.C.6).
Non-negotiable **2. CONSISTENT, COHERENT CONTENT** Each course's instructional materials are coherent and consistent with the content in the Standards. ☒ Yes ☐ No	**Required** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. In Grade 1, there are two supporting clusters, 1.MD.C and 1.MD.D. In Unit 12, Lesson 3, students answer the following problem in the Try It section of the lesson: "Count by tens, fives, or ones to find the value of the group of coins. Write the value on the line." The groups of coins have the same value, aligning to supporting LSSM 1.MD.D.5 and

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			connecting to major LSSM 1.NBT.A.1. In Unit 16, Lesson 7, students sort objects into 2 groups, then circle the objects that belong in one group and cross out the objects that belong in the other group. For example, one question asks students to circle the numbers that are less than fifty and cross out the numbers that are greater than fifty. This lesson connects supporting LSSM 1.MD.C.4 to major LSSM 1.NBT.B.3. Another example is evidenced in Unit 17, Lesson 3, in which students compare measurements, connecting supporting standard LSSM 1.MD.A.1 to major standard LSSM 1.NBT.A.1.
	Required **2b)** 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.	**Yes**	Materials connect two or more clusters in a domain or two or more domains in Grade 1. For example in Unit 1, Lesson 6, students learn to skip count by 10s through 100 using a numberline and hundreds chart, connecting clusters A and B of the Number and Operations in Base Ten (NBT) domain (LSSM 1.NBT.A.1 and 1.NBT.B.2c). In Unit 3, Introduction to Addition, connections are made between the Operations and Algebraic Thinking (OA) and Number and Operations in Base Ten (NBT) domains. For example, in Unit 3, Lesson 2, students relate counting to addition and subtraction (LSSM 1.OA.C.5) by adding two-digit numbers (LSSM 1.NBT.C.4a) as they use cubes and drawings to solve “A group of 14 combined with a group of 12.” The Operations and Algebraic Thinking (OA) and Number and

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Operations in Base Ten (NBT) domains are also connected in Unit 13. In Unit 13, students add and subtract using objects and sketches and identify different ways to add and subtract. Students find the sum of two numbers through 100 (LSSM 1.NBT.4) and solve word problems using drawings (LSSM 1.OA.A.1). Specifically, in Lesson 11, students add a two-digit number with a one-digit number using base ten blocks. Unit 11, Lesson 3 connects clusters A and C of the Operations and Algebraic Thinking (OA) domain. For example, students solve the following problem: "19 – 5 is equal to 14. Write three other expressions that show 14." Students add and subtract within 20 using the relationship between addition and subtraction to write equations equal to 14, aligning to LSSM 1.OA.A.1 and 1.OA.C.6.
Non-negotiable **3. RIGOR AND BALANCE:** Each grade's instructional materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application. ☒ Yes ☐ No	**Required** **3a)** ***Attention to Conceptual Understanding:*** Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts for Grade 1. The curriculum utilizes 17 units to build conceptual understanding throughout Grade 1. For example, in Unit 3, Lesson 1, students begin to develop conceptual understanding of addition by finding the sum of two numbers using a part-part-whole worksheet and two different color cubes (LSSM 1.OA.A.1). In Units 4 and 6, this understanding continues to build as students add and subtract within 20, using strategies such as making ten, counting on, or decomposing a number leading to ten

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			(LSSM 1.OA.C.6). In Unit 7, Lesson 4, students determine the unknown whole number in an addition or subtraction equation that relates three whole numbers using cubes as needed (LSSM 1.OA.D.8). Students first understand that the value on one side of an equal sign must be the same value of the other side by completing an activity with a balance. Students add cubes to one side of the balance to make both sides equal and then find the missing addend in a number sentence. Students then apply this understanding in the Finding Missing Numbers activity sheet. Students use cubes to model the number sentence and write the missing numbers for problems such as 8+_=14 and 15=6+_. Subtraction is developed through six of the 17 units. For example, in Unit 8, Lesson 1, students begin to develop conceptual understanding of subtract using drawing and objects. In the Learn section of the digital lesson, students manipulate pictures of grasshoppers to solve the word problem "2 grasshoppers leapt from the log. Take away 2 grasshoppers from the group of 6. How many grasshoppers are left on the log?" Later, in Unit 8, students continue to build understanding by using one-to-one correspondence with objects in order to subtract in the problem, "There are 4 black cats and 7 white cats. How many less is 4 than 7?" (LSSM 1.OA.C.6).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	Required **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	Materials are designed so that students attain the fluencies and procedural skills required by the standards for Grade 1. Students have the opportunity to practice fluency in the "Skills Update" section of any digital lesson. In Unit 3, Lesson 2, Skills Update, students engage in LSSM 1.NBT.A.1, when answering "Write the number fifty-four"; "Write the numbers fifty-eight through sixty-eight"; and "What number comes after 83?" In Unit 6, Lesson 4, students fluently add within 20 when completing the "Sum Bug" activity during the digital lesson (LSSM 1.OA.C.6). In Unit 11, Lesson 5, Skills Update, students solve subtraction problems for fluency as they engage in a digital game called Space Coaster (LSSM 1.OA.C.6). The objective of the game is to fluently subtract numbers in order to build a roller coaster. In some of the Unit Guides, the fluency standards that are embedded in the units are listed under a section titled "Fluency;" however, several unit guides include guidance that incorrectly identifies fluency standards. For example, in the Unit 8 Guide under "Fluency," guidance states that "The following fluency standards are embedded throughout unit 8," and includes LSSM 1.OA.C.6, 1.OA.D.7, and 1.OA.D.8. Although these standards are addressed in Lessons 1, 3, 4, 7, 8, 9, 10, 11, and 12; the guidance incorrectly identifies LSSM 1.OA.D.8 as a fluency standard. Other examples include LSSM 1.NBT.C.5 in Unit 9

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			and Unit 13, LSSM 1.OA.A.1 in Unit 12, and LSSM 1.OA.D.8 in Unit 13, 14, 15, and 16.
	Required **3c) *Attention to Applications:*** 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.	**Yes**	Materials are designed so that students spend sufficient time working with engaging applications for Grade 1. Grade 1 has three application standards, LSSM 1.OA.A.1, 1.OA.A.2, and 1.MD.C.4. Units 14 and 15 focus on addition and subtraction word problems within 20 using equations, blocks, and diagrams as they add to, take from, put together, take apart and compare numbers. For example, in Unit 14, Lesson 5, Skill Sheet, students apply knowledge of subtraction to answer "The book return at the library contains 62 books. 20 are children's books. The rest are adult books. How many adult books are in the book return?" (LSSM 1.OA.A.1). In Unit 14, Lesson 9, students solve the following problem, "Faith had some crayons. She gave her brother 5 crayons. Now she has 9 crayons. How many crayons did she have at the beginning?" Students are provided a start unknown equation along with counters to model and solve the problem (LSSM 1.OA.A.2 and 1.OA.A.2). In Unit 15, Lesson 4, students solve the following problem, "So far, 15 boys and 23 girls have entered the water park. How many more boys would have to enter to have the same number of boys as girls? Which number sentence shows what is happening in this problem?" Students are provided the choices 15 + 23 =? And 23 = 15 + ? (LSSM 1.OA.A.1). Additionally, in

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			Unit 5, Lesson 6, students use cubes to show three different ways to make a number. For example, students show 3 ways to make 16, including one way with three addends, and two ways with two addends. Students apply this understanding as they solve word problems on the Skill Sheet involving 3 whole numbers, such as "A bag has 3 red marbles. It has 2 blue marbles. It has 4 purple marbles. How many marbles are there in all?" and "A box has 6 blue blocks. It has 3 pink blocks. It has 2 yellow blocks. How many blocks are in the box?" (LSSM 1.OA.A.2). Another example of students engaging in application is in Unit 16, Lesson 8, as students create a tally chart to model "Carla has a bag of marbles. In her bag, Carla has 3 blue marbles, 5 red marbles, and 2 yellow marbles." Students use the chart they created to answer "Which color marble does Carla have the most of?" and "How many marbles are in Carla's bag?" (LSSM 1.MD.C.4).
	Required **3d) *Balance:*** The three aspects of rigor are not always treated together and are not always treated separately.	**Yes**	It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately. The balance of rigor is apparent in the design of the curriculum as each lesson in the curriculum has multiple sections to develop Grade 1 standards. The three components of rigor can be found in different parts of the lesson. For example, in the Skills Update and Get Ready sections, students have an opportunity to

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			work with fluency standards for Grade 1. In Unit 16, Lesson 2, students focus on the conceptual understanding of putting shapes together to form new shapes (LSSM 1.G.A.2). Unit 16, Lesson 9 incorporates all three components of rigor as students use pictures and graphs to show information and then compare the data shown in the pictures and graphs (LSSM 1.MD.C.4). For example, in the Try It section, students organize data about gym toys in a picture graph and answer how many questions, including more or less questions. In Unit 12, Lesson 5, students order objects by length combining conceptual understanding and procedural skill and fluency (LSSM 1.MD.A.1). In Unit 1, Lesson 4, students engage in conceptual understanding and procedural skill and fluency. In the Get Ready section, students fluently count to 50. Then students engage in three Learn sections that develop conceptual understanding when counting using a numberline. Students finally apply their understanding of counting when answering "Count from 38 to 78" in the Try It section of Lesson 4 (LSSM 1.NBT.A.1).
Non-negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.	**Required** **4a)** 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.	**Yes**	Materials promote focus and coherence by connecting the practice standards with Grade 1 content. A Unit Guide accompanies each unit and lists the practice standards that are addressed within each lesson of that unit. In the Unit Guide, on the right hand side of the page,

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
☒ Yes ☐ No			Standards for Mathematical Practice are listed for the lesson. In addition, the guide breaks down each mathematical practice, explains how they are addressed in the unit, and provides examples in the "Integration of Mathematical Practice Standards" section of the guide. For example, Unit 7, Lesson 4 states that the lesson will emphasize MP.1, 2, and 4 as students "using a balance model and cubes, find the missing addend in a number sentence." In Unit 7, Lesson 5, students utilize MP.1, 2, and 4 as they use cubes and a number line to find the missing addend in an addition number sentence (LSSM 1.OA.D.8). Additionally, in Unit 7, Lesson 6, students look for and make use of structure (MP.7) as they add frogs and realize that no matter of the order they add them in, the total remains the same, which can be applied to any number combination (LSSM 1.OA.D.8.). In Unit 12, Lesson 7, students engage in MP.2 and MP.6, after reading an e-book in which they compare objects using nonstandard measurements to compare items (LSSM 1.MD.A.1). In Unit 15, Lesson 4, students use appropriate tools strategically (MP.5) and look for and express regularity in repeated reasoning (MP.8) as they identify whether or not the question is asking to make equal parts, then find the number sentence needed to answer the question, and finally use base ten blocks to solve the

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			problems (LSSM 1.OA.A.1, 1.OA.D.8, 1.NBT.C.4).
Section II: Additional Criteria of Superior Quality			
5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: 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. ☒ Yes ☐ No	**Required** **5a)** 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.	**Yes**	Materials provide all students extensive work with grade level problems. Students solve grade level problems in each lesson within the curriculum. The lessons in the curriculum are broken into several sessions with options for additional practice in a printed version. The materials provide students the opportunity to work with problems in a variety of formats to integrate and extend concepts and skills. For example, in Unit 2, Lesson 2, there are 30 problems for students to solve in the Learn It and Try It sections. In the lesson, students work on telling time to the hour and half hour on analog and digital clocks (LSSM 1.MD.B.3). In Unit 3, Lesson 8, students solve 27 problems within the lesson to determine the unknown sum in an addition equation with a box that represents the unknown (LSSM 1.OA.D.8). In Unit 5, Lesson 5, students work on using methods such as counting on and using a number line or hundreds chart to find the sum in the following problem: “Coleman has 4 cookies. His friend gives him 5 more. Count on from 4 to find how many cookies Coleman has in all.” (LSSM 1.OA.C.6). In Unit 13, Lesson 6, students work 18 problems in the lesson using base 10 blocks to model two-digit numbers in different ways and begin to understand

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			regrouping, reflecting the intent of LSSM 1.NBT.B.2.
	Required **5b)** 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.	**Yes**	Materials relate Grade 1 concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that students connect prior knowledge to new concepts in the Get Ready section of the digital lesson. For example, the Unit 10, Lesson 2, the Get Ready section begins with the practice of writing addition and subtraction sentences to represent everyday situations to connect previously learned skills so that students will be able to use addition facts to find the difference in related subtraction problems (LSSM 1.OA.B.4). In kindergarten, students learned to solve addition and subtraction problems within 10 using objects and drawings (LSSM K.OA.A.2). In Grade 1, students build upon this knowledge to find unknown addends in problems using commutative and associative properties (LSSM 1.OA.B.3). For example, in Unit 5, Lesson 8, students add three numbers by grouping the addends in the following problem, “5 + 6 + 4=.” In kindergarten, students compared the length of two objects with a measurable attribute in common to see which object had more or less, then described the difference. In Grade 1, Unit 12, Lesson 5, students build upon prior knowledge to

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			order three objects by length and compare the lengths of two objects indirectly by using the third object (LSSM 1.MD.A.1). In kindergarten, students learned how to add and subtract up to 5 (LSSM K.OA.A.5). Grade 1 builds on this in the beginning of the year by using the "count on" strategy utilized in Unit 5, Lesson 5. In that lesson, students add 23 + 4 on the Try It workbook pages. Students start at 23 and then count on to 27 (LSSM 1.OA.C.6).
	5c) Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.	**Yes**	Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards for Grade 1. For example, in Unit 2, Lesson 2, students identify time to the hour using a digital clock and analog clock, reflecting the language and intent of LSSM 1.MB.B.3. In Unit 11, Lesson 4, the objective states "Determine the unknown subtrahend in a subtraction equation with a symbol representing the unknown, limited to three numbers, minuends less than or equal to 20," reflecting the language of LSSM 1.OA.A.1. In Unit 8, Lesson 3, the objectives state for students to "identify the number that is one more than a given number; explain the meaning of addition or subtraction symbol; represent subtraction using objects, drawings, or explanations, limited to minuends up to 10." The objectives match the language and intent for addition in standards LSSM 1.OA.B.3 and 1.OA.C.6. The objective for Unit 12, Lesson 5 includes "order three

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			objects according to length," reflecting the language and intent of LSSM 1.MD.A.1. In Unit 16, Lesson 2, students "compose a composite two-dimensional shape using rectangles, squares, trapezoids, triangles, half-circles, and/or quarter-circles; Decompose a composite two-dimensional shape into rectangles, squares, trapezoids, triangles, half-circles, and /or quarter circles," reflecting the language of LSSM 1.G.A.2.
6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards. ☒ Yes ☐ No	**Required** **6a)** 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.	**Yes**	Materials attend to the full meaning of each practice standard for Grade 1. For example, in Unit 10, Lesson 11, students answer "From your daily life, find three examples of subtraction that you can solve using strategies you learned in this unit." Students describe each example using one to two sentences, state the strategy they used to solve the subtraction problem, and explain why they chose that strategy to solve the subtraction problem. The prompted questions help students realize that doing mathematics involves solving problems, and discussing how they solve them demonstrates use of MP.1 (Make sense of problems and persevere in solving them). In Unit 9, Lesson 3, students engage in MP.2 (Reason abstractly and quantitatively) when using online flashcards for subtraction facts with minuends through 20 using mental strategies. In Unit 11, Lesson 6, students engage in MP.5 (Use appropriate tools strategically) when determining which

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			subtraction strategy can be used to find the missing numbers in a subtraction sentence. In Unit 12, Lesson 1, students engage in MP.6 (Attend to precision) when describing coins by color, sizes, and picture to name and compare coins. In Unit 13, Lesson 2, students engage in MP.7 (Look for and make use of structure) when grouping objects into tens and ones to identify the number of tens and ones in each group of pictures in the Learn section of the digital lesson. In Unit 1, Lesson 6, students engage in MP.8 (Look for and express regularity in repeated reasoning) when counting by 10s through 100 and skip counting by tens and fives to complete a pattern. In doing this, students learn to look for repeated reasoning as every number they say begins or ends in a similar or patterned way. Another example of MP.8 is found in Unit 13, Lesson 9, when students learn to make groups of 10 to add two numbers. The teacher has students place 14 circles on one sheet of paper and 20 on another sheet. The teacher is prompted to state, “To add 14 and 20, move all the circles to the last sheet of paper and count them.” Then the teacher asks, “What is 14 plus 20?” Continuing to do this repetitively allows students to see the relationship with tens and ones. For example, 1 ten and 2 tens will be 3 tens and 4 ones and 0 ones is 4 ones, for a total sum of 34.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	Required **6b)** 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.	**Yes**	Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key Grade 1 mathematics that is detailed in the content standards. Each lesson has a Try-Learn Routine. There are lessons embedded in each unit that allow students to discuss their solution strategies, explain and critique their reasoning. For example, in Unit 13, Lesson 8, students use cards 0-9 to create two-digit numbers. Students then discuss with a partner which number created is larger. When both students agree, a comparison symbol is recorded. Students explain to the partner a rule for comparing numbers using vocabulary words such as tens and ones and record their work. In the Unit 3, Lesson 10 Reflection section, students discuss their reasoning for creating number sentences containing certain numbers with a partner, then reflect on the meaning of the equal symbol and compare it to a balance. Students evaluate the accuracy of their work and articulate their understanding of symbols in writing. In Unit 4, Lesson 5, students construct viable arguments at the end of the quiz when describing the problems, the strategies used to solve the problem, and the reasons why they chose the strategy as they derived answers to the problems. In Unit 13, Lessons 8, 13, and 15, students make claims and defend or critique claims of others. For example, in Lesson 8,

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			students form a rule determining whether a two-digit number is larger or smaller than another based on trials with a partner. They utilize specific terms to form the rule. In Lesson 15, students explain how and why they chose specific strategies in the digital lesson. They identify strategies used by a fictitious student and explain how the student solved the problem. In the Unit Guide, there are activities to engage students in problem solving. For example, in Unit 5, students engage in a task in which they collect 20-30 items and then separate the collection into 3-4 groups by type, color, etc. The teacher is prompted to "ask students to count the number of rocks in each group and write it on the outside of each baggie." The teacher then prompts the discussion by asking students how many rocks they have in all. Students are to count on to find the total amount. If time permits, the teacher is to ask students to separate their collection in a different way. The students record a number sentence for their work. The teacher is prompted to ask, "Which two groups would you add first? Why?"
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	**Yes**	Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. The Unit Guide lists and explains thoroughly the role of the practice standards utilized in each lesson within a unit. The Unit

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			Guide also has a section titled "Integration of Mathematical Practice Standards." The Unit Guide states, "These are the mathematical practice standards that are addressed in this unit with examples of how each standard is addressed." The Unit 10 Unit Guide states the use of MP.1, MP.2, MP.3, MP.4, MP.6 and MP.7. Each lesson within the unit lists specific math practice standards. For example, Unit 10, Lesson 10, lists use of MP.1 and MP.2. This same format is used in each Unit Guide throughout materials. Each Lesson Guide explains the MP that is focused on within that lesson and how it is utilized within the lesson. For example, the Unit 5, Lesson 2 Lesson Guide details "Although there are other Standards for Mathematical Practice addressed in this lesson, the focus of this activity is MP.5: Use appropriate tools strategically. In this activity, students use a number line in order to find 'one more.' Students learn that they count to the right one increment when they do this. They observe the relationship between two numbers that are one unit away from each other. In the future, students can use similar visual and tactile guides to help them keep track of their increasing numbers."
	6d) Materials explicitly attend to the specialized language of mathematics.	**Yes**	Materials explicitly attend to the specialized language of mathematics. The Lesson Guide lists and defines mathematical terminology under the "Keyword" section. For example, in Unit 3,

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			Lesson 8, Lesson Guide, the keywords listed are “addition sentence: a number sentence that involves addition only” and “equality: state of being equal.” Students interact with these words in the Lesson Introduction of the digital lesson. In Unit 7, Lesson 2, students engage with the term “expressions” in the Learn section of the digital lesson. In Unit 13, Lesson 3, Lesson Guide, lesson vocabulary states use of “tens rod,” “ones cube,” and “place value.” In Unit 13, Lesson 8, students will “describe the meaning of the numbers 10, 20, 30, 40, 50, 60, 70, 80, or 90, as the composition of one, two, three, four, five, six, seven, eight, or nine 10s, using words, pictures or objects” (LSSM 1.NBT.B.2). Terms are written in bold, underlined purple font that are clickable in the digital lesson. Once clicking on the word, a pop up box appears on the screen with a definition and examples of the term. For example, in Unit 16, Lesson 8, the following words are bold on the Student Version, “tally chart, bar graphs, and data,” drawing attention to the terminology used to discuss organizing data in charts and graphs. Students are able to click on the word and read the definition that is displayed on the screen (LSSM 1.MD.C.4).
7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to give teachers and students the	**Required** **7a)** 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**	In the materials, students are asked to produce answers in a variety of ways. Students are asked to produce answers and solutions in arguments, explanations, diagrams, and other mathematical models.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
tools they need to meet the expectations of the Standards. ☒ Yes ☐ No	arguments and explanations, diagrams, mathematical models, etc.		For example, in Unit 7, Lesson 4, students begin with a digital lesson to find a missing addend. Students manipulate a digital scale to engage in the following problem: "Add cubes to the right side of the balance to make both sides equal and and match the expression, 5 + 2 = 7." Within the same lesson, students use hands-on manipulatives, such as cubes, to work problems on a worksheet. On the Unit 7 Checkpoint, students answer a variety of questions including multiple choice and fill-in-the-blank. Another example is evidenced in Unit 14, Lesson 1, students fill-in the blanks with correct answers. Students model the problems using base ten blocks to solve addition problems. In Unit 14, Lesson 14, students determine if the word problem is a comparing problem, then select the number sentence used to answer the problem. In Unit 17, students complete a unit project by composing two-dimensional shapes to create composite shapes, measuring lengths, comparing lengths, and using addition and subtraction for problem solving.
	Required **7b)** 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	**Yes**	Materials provide separate teacher materials that support and reward teacher study. The instructional materials provide teacher planning and guidance to support the instructional process. The digital teacher components are found in each unit. Each unit utilizes four tabs titled "Lesson List," "Materials," "Advanced Prep," and "Objectives." In the "Lesson

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	of desired mathematical behaviors being elicited among students.		List" tab, lessons are clickable and state if an assessment is available for the lesson. In the "Materials" tab, the lesson is broken into required materials that the student, learning coach, and teacher can download or print. The "Advanced Prep" tab provides a pacing guide to each lesson and more explicit directives to effectively teach the lesson. The "Objectives" tab lists all objectives the lesson will address. The Unit Guide provided for each unit lists lessons, standards, mathematical practices application, and graded assignments and assessments for each unit. Teaching notes are also documented in the Unit Guide. For example, in Unit 15, Unit Guide, the teaching note states, "The First Grade LSSM limits word problem addition and subtraction to 20. Problems in this unit involving word problem addition and subtraction beyond 20 are for enrichment purposes and are not included in assessments." The guide details the fluency standards to be addressed within the unit, as well as pinpoints difficult concepts for misconceptions. An area within the Unit Guide titled "Supports for English Language Learners" identifies the resources provided within the unit. A Lesson Guide is also provided for each lesson in the materials that is broken into sections titled "Prepare," "Skills Update," "Get Ready," "Learn," and "Try It," reflecting what will be taught in the student digital lesson. In the Lesson Guide,

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			the objective, materials needed, and lesson overview are included. In the Overview, activities within the lesson are labeled as “online” or “offline,” to inform the teacher where students will be working during the lesson. Any keywords for the lesson are also listed on the Lesson Guide.
	7c) 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**	Materials include support for English Language Learners and other special populations that is thoughtful and can help those students meet the same standards as all other students. The materials utilize multiple visual tools within the lesson such as number lines and charts to help students understand mathematical processes. In Unit 8, Lesson 1, students are introduced to the concept of subtraction. To help visualize and understand the concept of subtraction, taking away, students watch videos that illustrate subtraction problems, such as a group of six grasshoppers sitting on a log and two hopping away to show 6 − 2. When new vocabulary is introduced, students have access to defined pop-ups that can be read and reviewed throughout the lesson. Lessons and problems can be read aloud using audio technology by clicking the “Read” button. For example, in Unit 13, Lesson 1, colorful animated slides are provided, called “Tens, Ones, and Estimation,” to demonstrate with insects how to count by tens using ten frames. Support for English Language Learners is

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			provided in the Unit Guides. For example, in Unit 7, support includes "Manipulatives, such as cubes, household objects, crayons, and other items students use to represent problems and concepts, will help English language learners develop their conceptual knowledge and vocabulary. Throughout unit 7, cube trains are used to provide students with the opportunity to compare and combine addends. Encourage students to talk about the cube trains as they touch them and look at them."
	7d) 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. Each lesson follows a sequence of multiple digital sections. Students develop new mathematical knowledge in the Learn sections and apply the newly learned mathematics in the Try It sections. For example in Unit 8, Lesson 5, students compare expressions (LSSM 1.OA.D.7). In the Learn section, students watch a video in which cubes are used to model expressions to help them determine if the expressions are equal. In the Try It section, students complete work online by clicking correct answers from a list to solve three problems such as "Which number sentence means the same as 4 + 3 = 7?" In the next Learn section, students engage in an online activity in which they will select the missing number to make two expressions equal. In the Try It section, students complete eight problems on an

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			offline worksheet. Some lessons include Learn it workbook pages followed by Try it workbook pages. Additional worksheets in the form of documents are also included to allow students adequate practice of newly learned skills. For example, in Unit 13, Lesson 14, students learn to compare two subtraction strategies, counting back on a number line and breaking apart numbers, and then apply this learning in a practice worksheet. (LSSM 1.OA.C.6 and 1.NBT.C.4).
	7e) Lessons are appropriately structured and scaffolded to support student mastery.	**Yes**	Lessons are appropriately structured and scaffolded to support student mastery using a gradual release model. Each lesson is constructed of multiple sections, Introduction, Skills Update, Learn, and Try It. In Unit 1, Lesson 7, students use the symbols for less than, equal to, or greater than to compare and order whole numbers through 100 (LSSM 1. NBT.B.3). The lesson begins with a connection to prior knowledge of comparing objects in the Get Ready section. Students engage in a fluency practice, answering taller/shorter and more than/less than questions in the Skills Update section. In the Learn section, students manipulate household items, such as straws, to work problems prompted by the online teacher. Finally, in the Try It section, students work on an offline worksheet to compare numbers independently. Additionally, in Unit 7, Lesson 2, students review different ways to show a number (LSSM 1.OA.C.6) in the

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Get Ready section. This activity helps students prepare to add two or more numbers. Students attempt the problem "Draw 4 red stars, a plus symbol, 1 blue star, another plus symbol, and 1 yellow star, followed by an equal symbol." Then students respond to "What number do these pictures show?" Later, in Lesson 7, students make trains using unit cubes. Students use 9 red and 7 blue for 9 + 7. Students determine how many cubes there are. If the trains are flipped, putting blue first, students determine if the total changes. This leads into finding missing addends for 9 + 7 = _ + 9.
	7f) Materials support the uses of technology as called for in the Standards.	**N/A**	The LSSM does not call for use of technology for Grade 1.
FINAL EVALUATION ***Tier 1 ratings*** receive a "Yes" for all Non-negotiable Criteria and a "Yes" for each of the Additional Criteria of Superior Quality. ***Tier 2 ratings*** receive a "Yes" for all Non-negotiable Criteria, but at least one "No" for the Additional Criteria of Superior Quality. ***Tier 3 ratings*** receive a "No" for at least one of the Non-negotiable Criteria.			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**
I: Non-negotiable Criteria of Superior Quality[4]	1. Focus on Major Work	**Yes**	Materials devote a large majority of time to the major work of the grade. In the materials, 90% of the lessons are focused on major content standards for Grade 1. Materials spend minimal time on content outside of Grade 1. In assessment materials, assessment components do not make students/teachers responsible for

[4] Must score a "Yes" for all Non-negotiable Criteria to receive a Tier I or Tier II rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			any topics before the grade in which they are introduced.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Materials connect two or more clusters in a domain or two or more domains in Grade 1.
	3. Rigor and Balance	**Yes**	Materials develop conceptual understanding of key mathematical concepts for Grade 1. Materials are designed so that students attain the fluencies and procedural skills required by the Standards for Grade 1. Materials are designed so that students spend sufficient time working with engaging applications for Grade 1. It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately. However, some of the Unit Guides incorrectly identify standards as fluency standards within the "Fluency" section, such as LSSM 1.OA.D.8 in Unit 8, LSSM 1.NBT.C.5 in Unit 9 and Unit 13, LSSM 1.OA.A.1 in Unit 12, and LSSM 1.OA.D.8 in Unit 13, 14, 15, and 16.
	4. Focus and Coherence via Practice Standards	**Yes**	Materials promote focus and coherence by connecting the practice standards with Grade 1 content.
II: Additional Criteria of Superior Quality[5]	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Materials provide all students extensive work with course-level problems. Students solve grade level problems in each lesson within the curriculum. Materials relate

[5] Must score a "Yes" for all Additional Criteria of Superior Quality to receive a Tier I rating.

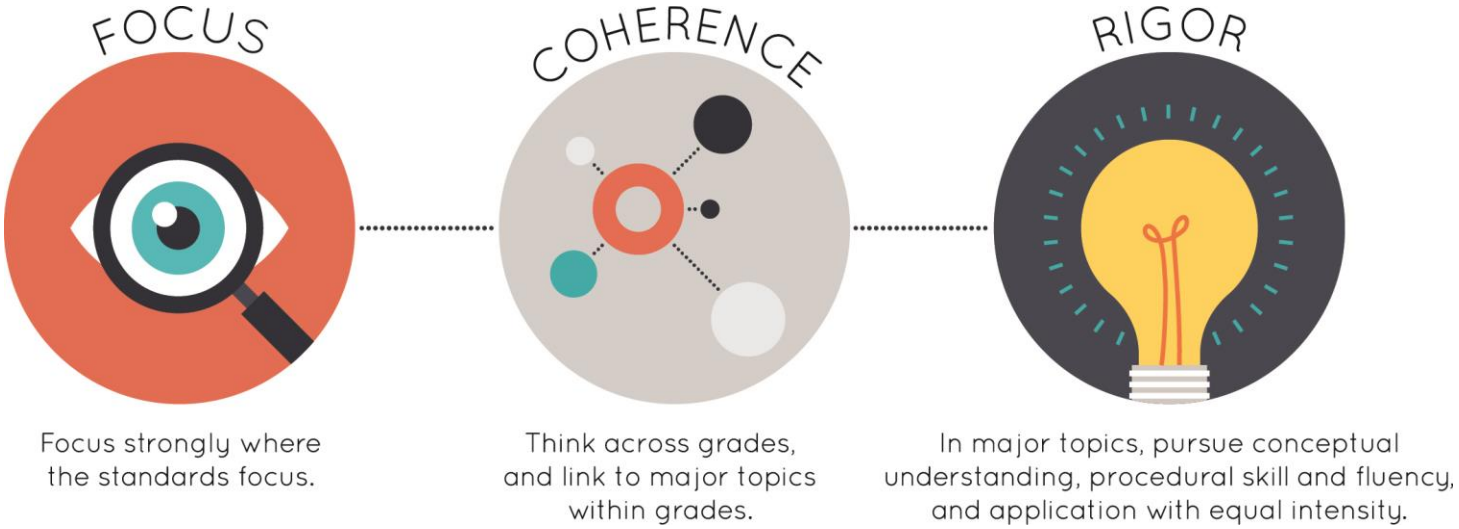
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Grade 1 concepts explicitly to prior knowledge from earlier grades and courses. Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards for Grade 1.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	Materials attend to the full meaning of each practice standard for Grade 1. Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key Grade 1 mathematics that is detailed in the content standards. Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. Materials explicitly attend to the specialized language of mathematics
	7. Indicators of Quality	**Yes**	In the materials, students are asked to produce answers in a variety of ways. Materials provide separate teacher materials that support and reward teacher study. The instructional materials provide teacher planning and guidance to support the instructional process. Materials include support for English Language Learners and other special populations that are thoughtful and help those students meet the same standards as all other students. The underlying design of the materials distinguishes between problems and exercises. Lessons are appropriately structured and scaffolded to support

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			student mastery using a gradual release model.
FINAL DECISION FOR THIS MATERIAL: **Tier I, Exemplifies quality**			

Instructional Materials Evaluation Tool for Alignment in Mathematics Grades K – 12 (IMET)

FULL CURRICULUM
Instructional Materials

Strong mathematics instruction contains the following elements:



Title: **Math+Orange Summit LA**

Grade/Course: **2**

Publisher: **K12 Inc.**

Copyright: **2019**

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 and Coherence via Practice Standards (Non-negotiable)	
5. Alignment Criteria for Standards for Mathematical Content	
6. Alignment Criteria for Standards for Mathematical Practice	
7. Indicators of Quality	

To evaluate instructional materials for alignment with the standards and determine tiered rating, begin with **Section I: Non-negotiable Criteria**.

- Review the **required**[1] Indicators of Superior Quality for each **Non-negotiable** criterion.
- If there is a "Yes" for all **required** Indicators of Superior Quality, materials receive a "Yes" for that **Non-negotiable** Criterion.
- If there is a "No" for any of the **required** Indicators of Superior Quality, materials receive a "No" for that **Non-negotiable** Criterion.
- Materials must meet **Non-negotiable** Criterion 1 and 2 for the review to continue to **Non-negotiable** Criteria 3 and 4. Materials must meet all of the **Non-negotiable** Criteria 1-4 in order for the review to continue to Section II.
- If materials receive a "No" for any **Non-negotiable** Criterion, a rating of Tier 3 is assigned, and the review does not continue.

If all Non-negotiable Criteria are met, then continue to **Section II: Additional Criteria of Superior Quality.**

- Review the **required** Indicators of Superior Quality for each criterion.
- If there is a "Yes" for all **required** Indicators of Superior Quality, then the materials receive a "Yes" for the additional criteria.
- If there is a "No" for any **required** Indicator of Superior Quality, then the materials receive a "No" for the additional criteria.

Tier 1 ratings receive a "Yes" for all Non-negotiable Criteria and a "Yes" for each of the Additional Criteria of Superior Quality.
Tier 2 ratings receive a "Yes" for all Non-negotiable Criteria, but at least one "No" for the Additional Criteria of Superior Quality.
Tier 3 ratings receive a "No" for at least one of the Non-negotiable Criteria.

[1] **Required Indicators of Superior Quality** are labeled "**Required**" and shaded yellow. Remaining indicators that are shaded white are included to provide additional information to aid in material selection and do not affect tiered rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Section I: Non-negotiable Criteria of Superior Quality **Materials must meet all of the Non-negotiable Criteria 1-4 in order for the review to continue to Section II.**			
Non-negotiable **1. FOCUS ON MAJOR WORK[2]:** Students and teachers using the materials as designed devote the large majority[3] of time to the major work of the grade/course. ☒ Yes ☐ No	**Required** **1a)** 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.	**Yes**	Materials devote a large majority of time to the major work of the grade. In the materials, 93% of the lessons are focused on major content standards for Grade 2. Specifically, 83% of lessons focus on major standards alone, 11% of the lessons focus on a combination of major and supporting/additional standards, and 7% of the lessons focus on supporting and/or additional standards.
	Required **1b)** 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.	**Yes**	Materials spend minimal time on content outside of the appropriate grade level. In the assessment materials, assessment components do not make students/teachers responsible for any topics before the grade in which they are introduced. Lessons within each unit focus on grade-level standards without deviating to content outside of the grade level. Quizzes, unit reviews, and unit checkpoints all provide on-grade level learning based on the content standards of the lessons provided in the units. For example, in Unit 8, Lesson 6, students solve story problems. Students decide if addition or subtraction should be used to

[2] For more on the major work of the grade, see Focus by Grade Level.
[3] 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
			solve the story problem, then justify their solution (LSSM 2.OA.1, 2.NBT.A.1, 2.NBT.A.1a, 2.NBT.A.1b, 2.NBT.B.7, and 2.NBT.B.8). In Unit 1, Lesson 13 Checkpoint Assessment, students use base-ten blocks to count and model numbers. Students write numbers in word form and expanded form. Students explain the place value of given numbers and compare two numbers to find which one has the greater value (LSSM 2.NBT.A.1, 2.NBT.A.2, 2.NBT.A.3, 2.NBT.A.4, and 2.NBT.B.7). In Unit 11, Lesson 14 Checkpoint Assessment, students use base ten blocks and place value mats to solve three-digit addition and subtraction problems (LSSM 2.OA.A.1, 2.OA.B.2, 2.NBT.A.1, 2.NBT.A.1a, 2.NBT.A.1B, 2.NBT.A.2, and 2.NBT.B.5).
Non-negotiable **2. CONSISTENT, COHERENT CONTENT** Each course's instructional materials are coherent and consistent with the content in the Standards. ☒ Yes ☐ No	**Required** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. In Unit 1, students develop an understanding of place value (LSSM 2.NBT). This understanding is reinforced in Unit 2 as students work with time and money. For example, in Unit 2, Lesson 3, students tell time to the nearest five minutes (LSSM 2.MD.C7) by skip-counting by 5's (LSSM 2.NBT.A.2), a skill developed in Unit 1. In Lesson 4, students find the value coins and bills (LSSM 2.MD.C.8) using place value strategies (LSSM 2.NBT.A.1, 2.NBT.B.7) developed in Unit 1. At the start of the lesson, students

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			determine groups of coins that have the same value as a nickel, a dime, and a quarter. For example, students determine that 10 pennies have the same value as a dime and that three nickels and a dime have the same value as a quarter. Then, students find the value of a group of coins by counting on from the coins with the greatest value to the coins with the least value. In Unit 12, Lesson 5, students use skip counting to solve addition, subtraction, and multiplication problems. Students are given numbers and decide which skip counting method is best to count to the given number. Students sort odd and even numbers to solve addition, subtraction, and multiplication problems. This lesson connects supporting LSSM 2.OA.C.3 to major LSSM 2.NBT.A.2 and 2.NBT.A.3. Unit 13, Lesson 2, students use a ruler to measure a set of objects. Students then represent those measures on a line plot. This lesson connects supporting LSSM 2.MD.D.9 to major LSSM 2.MD.A.1.
	Required **2b)** 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.	**Yes**	Materials include problems and activities that connect two or more clusters in a domain and/or two or more domains in the grade level where these connections are natural and important. For example, in Unit 7, Lesson 7, students write number sentences to solve addition and subtraction story problems within 100 and within 1000. This lesson connects the Operations and Algebraic Thinking (OA)

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			and Number and Operations in Base Ten (NBT) domains as students use strategies based on place value, properties of operations, and the relationship addition and subtraction to solve one- and two-step addition and subtraction word problems (LSSM 2.OA.A.1, 2.NBT.B.5, and 2.NBT.B.7). During the lesson, students are given a number of objects, then add an additional amount of objects to the first number to find the total number of objects. In Unit 11, Lesson 4, students solve story problems in which they compare groups or make two equal groups. This lesson connects Operations and Algebraic Thinking (OA) and Numbers and Operations of Base Ten (NBT) domains as students use strategies based on place value, understanding three digits of a three-digit number represent amounts of hundreds, and the relationship between addition and subtraction to solve two-step addition and subtraction word problems (LSSM 2.OA.A.1, 2.NBT.A.1, 2.NBT.A.1a, and 2.NBT.A.1b). During the lesson, students solve story problems to find out which item has more or less. Students use addition and subtraction to find the lesser or greater number. In Unit 12, Lesson 4, students use a number line to find the rule for a pattern. Students then use the rule and a number line to find the next term or missing term in the pattern. This lesson connects Operations and Algebraic Thinking (OA) and Numbers and

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Operations of Base Ten (NBT) domains, as well as Clusters A and B from the OA domain, as students use strategies based on skip counting within 1000, represent addition and subtraction, and fluently add or subtract using mental strategies to solve one- and two-digit word problems. (LSSM 2.OA.A.1, 2.OA.B.2, and 2.NBT.A.2).
Non-negotiable **3. RIGOR AND BALANCE:** Each grade's instructional materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application. ☒ Yes ☐ No	**Required** **3a)** ***Attention to Conceptual Understanding:*** Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts for Grade 2. In Unit 1, Lesson 1, students write numerals through 500 and work to build number sense as they read, write, and count from a given number (LSSM 2.NBT.A.1). In Lesson 4, students identify place value and develop place value understanding for numbers through 500. Students use base-ten blocks to model and identify the value of each digit in a three-digit number (LSSM 2.NBT.A.1). Once students have established number sense and place value understanding, students write numbers through 500 in expanded form in Lesson 5. This understanding is built upon in Lesson 6 and 7 as students model numbers in expanded form using base-ten blocks and then regroup to add numbers using base ten blocks (2.NBT.B.7). In Unit 3, Lesson 17, students break apart numbers to make subtraction problems easier to solve. Students participate in an interactive video, called Math Underwater, where they solve story problems throughout the video, breaking numbers apart to solve

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			subtraction problems (LSSM 2.NBT.B.8). In Unit 8, Problem Solving, Reason and Connect, Lesson 1 begins with story problems and students choose the number sentence to solve a word problem (LSSM 2.NBT.B.9). In Unit 8, Lesson 5, Explain Problem Solutions 1, students apply this understanding as they move into writing and identifying number sentences that correspond with what is happening in a word problem (LSSM 2.NBT.B.5). In Unit 8, Lesson 6, students are presented with word problems and tasked with explaining the action taking place in the problem (LSSM 2.NBT.B.9). In Unit 8, Lessons 9 and 10, students begin solving and creating word problems (LSSM 2.NBT.B.7). The sequence of lessons transitions from building conceptual understanding to applying concepts and explaining processes. In Unit 8, Lesson 12, students compare two story problems with missing addends to see how the problems are alike and develop strategies to solve similar problems. Students begin the lesson by reading a story problem and then write a similar story problem. Students then read additional problems and determine if they are alike and explain why using their understanding of missing addends and unknown totals. Students then read story problems, write number sentences to represent the problems, and apply the developed strategies to solve.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	Required **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	Materials are designed so that students attain the fluencies and procedural skills required by the standards for Grade 2. Students have the opportunity to practice fluency in the Skills Update section of each digital lesson. In addition, students engage in fluency games to reinforce and practice addition and subtraction throughout the materials. These activities are embedded within daily lessons. Students play the games in order to progress to the next stage of the lesson. For example, in Unit 4, Lesson 4, students solve addition and subtraction problems for fluency, as they engage in a digital game called Space Coaster. The objective of the game is to fluently subtract or add numbers in order to build a roller coaster (LSSM 2.NBT.B.5 and LSSM 2.NBT.B.6). Fluency and procedural skills are developed and practiced in lessons as required by standards. For example, in Unit 3, students first build an understanding of using strategies to add and subtract within 500. Then, in Lesson 3, students read a digital book titled “One More Bug.” Students fluently add numbers within 20 while doing a scavenger hunt in the book (LSSM 2.NBT.B.5). In Unit 3, Lessons 4 and 5, students fluently add two numbers with sums through 20 and subtract two numbers with minuends up through 20 (LSSM 2.OA.B.2). During the lesson, students solve procedural addition and subtraction problems. In Unit 11, students

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			extend their understanding of adding and subtracting within 1,000 by engaging in several lessons addressing the Operations and Algebraic Thinking and Number in Base Ten standards. Students have the opportunity to practice fluently adding and subtracting within 100 throughout the unit and the provided fluency skills activities (LSSM 2.NBT.B.5). For example, in Lesson 4, students begin the lesson by fluently adding and subtracting within 80 on the Practice Your Fluency Assignment Sheet. In Lesson 7, students begin the lesson by fluently adding and subtracting within 90 on the Practice Your Fluency Skills assignment sheet.
	Required **3c) *Attention to Applications:*** 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.	**Yes**	Materials are designed so that students spend sufficient time working with engaging applications for Grade 2. Grade 2 has four application standards, LSSM 2.OA.A.1, 2.MD.B.5, 2.MD.C.8, and 2.MD.D.10. Units 7 and 8 focus on using addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions (LSSM 2.OA.A.1). For example, in Unit 7, Lesson 9, students learn how to solve a story problem in which one quantity changes by addition. Students complete the Appear and Disappear Problems assignment sheet by using a chart to write a number-sentence problem and then solve the problem, “There were 37 beads

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			in a jar. A student poured some more beads in the jar, increasing the total number of beads to 86. How many more beads did the student add to the jar?" (LSSM 2.OA.A.1). In Unit 8, Lesson 8, students solve story problems and justify the solutions. Students circle Add or Subtract to show how they would solve each problem (LSSM 2.OA.A.1). Unit 4, Lesson 10, Explore Adding and Subtracting tasks, students use strategies for number sentences, breaking apart numbers, and mental math to find examples of addition and subtraction in their daily lives. Students are tasked with writing an example using 1-2 sentences that describes an addition activity from their day (LSSM 2.OA.A.1). Unit 5, Lesson 18, Explore Measurement, follows the same processes but using strategies for estimating length. The lesson incorporates adding inches and centimeters or subtracting inches and centimeters (LSSM 2.MD.B.5). In Unit 2, Lesson 4, students develop strategies for finding the value of groups of coins and groups of bills and then apply those strategies as they solve word problems involving money. For example, students solve the problem, "Marco bought an item from a store. He gave the cashier a ten dollar bill. The cashier gave him back 2 one dollar bills and 1 five dollar bill. How much did the item cost?" (LSSM 2.MD.C.8).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	Required **3d) *Balance:*** The three aspects of rigor are not always treated together and are not always treated separately.	**Yes**	It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately. The units offer a varied range of rigor across lessons. In the scope of each unit, the lessons progress in complexity so that, by the end of each unit, all three components of rigor have been addressed individually and/or in conjunction with other components. The balance of rigor is apparent in the design of the materials as each lesson has multiple sections to develop Grade 2 standards. For example, in the Skills Update and Get Ready sections of the lessons, students have an opportunity to work with Grade 2 fluency standards. In Unit 8, Lesson 10, Checkpoint, all three components of rigor are represented in the lesson as students write problems of their own. Students think about all the parts needed to write a good problem first and then write a story problem. For example, students complete the following task: “Write a story problem using the numbers 22 and 16. Then write a number sentence to help solve the problem.” (LSSM 2.OA.A.1 and 2.NBT.B.7). In Unit 9, Lesson 3, conceptual understanding and procedural skills are represented. Students use the term “number word” which indicates the English word for the numeral, such as “two” for the numeral 2. Students learn how to write number words through 1,000. In the Math Plus

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Orange Activity Book, Practicing Writing Number Words, students are given numbers up to 1,000 and to write the number in word form (LSSM 2.NBT.A.3). Unit 12, Lesson 2, Repeated Addition and Regrouping, utilizes procedural skills and conceptual understanding for the same standard, but then adds another procedural skill and fluency component as students are tasked with skip-counting to find the sum of an array and writing the repeated addition sentence that represents the skip counting in the array (LSSM 2.NBT.A.2).
Non-negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards. ☒ Yes ☐ No	**Required** **4a)** 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.	**Yes**	Materials address the practice standards in such a way to enrich the content standards of the grade. Every lesson in the materials includes at least one of the Standards for Mathematical Practice (MP) and most lessons include three or more of these standards. In mapping the practice standards, it is clear the number of mathematical practices increases as students progress from the opening to closing of each unit of study. The lessons follow a natural progression of increasing mathematical practices as the students' knowledge and skills develop over the course of the materials. A Unit Guide accompanies each unit and lists the practice standards that are addressed within each lesson of that unit. In the Unit Guide, Standards for Mathematical Practice are listed for the lesson. In addition, the guide breaks down each

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			mathematical practice, explains how they are addressed in the unit, and provides examples in the Integration of Mathematical Practice Standards section of the guide. For example, Unit 1, Lesson 3, states that the lesson will emphasize MP.5 and MP.7 as they write numerals through 500 by filling in numbers on Hundred Charts from 101 to 500. As they write the numerals on each chart, they identify patterns of what changes and what stays the same (LSSM 2.NBT.A.2). In the Learn It section, students write numerals on a hundreds chart through 500 (MP.5). In the Try It section, students write numbers as they hear them, fill in the missing numbers in the partial hundred charts, and write numbers from written form to standard form (MP.7). The Unit Guide for Unit 9, Lesson 1, states that the lesson will emphasize MP.7 and MP.8. In the lesson, students make use of structure as they count within 1,000 beginning and ending with any given number within the range and skip counting by 5s, 10s, and 100s within the range (MP.7). In this same lesson, they will also look for and express regularity in repeated reasoning, understanding the patterns that develop as they skip count (MP.8; LSSM 2.NBT.A.2). Unit 9, Lesson 21 contains emphasizes MP.2, MP.4, MP.6, MP.7, and MP.8. For example, students reason abstractly and quantitatively (MP.2) to demonstrate understanding of

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			place value. Students work with models (MP.4), words (MP.6), and digits to precisely represent numbers in base 10, compare numbers, and solve word problems (MP.7, MP.8) for numbers within 1000 (LSSM 2.NBT.A.1, 2.NBT.A.2, 2.NBT.A.3, 2.NBT.A.4, and 2.NBT.B.7). The Unit Guide for Unit 14, Lesson 1 states that the lesson will emphasize MP.4, MP.5, and MP.7. In this lesson, students lay number charts next to each other on a flat surface and toss a coin on the charts 15 times (MP.4). Students record the number where the coin lands after each trial, then determine if each number can be reached by skip-counting by 2s, 5s, 10s, or 100s (MP.7). Students use the thousands chart experiment table to organize results (MP.5; LSSM 2.NBT.2).
Section II: Additional Criteria of Superior Quality			
5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: 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. ☒ Yes ☐ No	**Required** **5a)** 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.	**Yes**	Materials provide all students extensive work with grade-level problems. Students solve grade-level problems in each lesson within the materials. The lessons are broken into several sessions with options for additional practice in a printed version. The materials provide students the opportunity to work with problems in a variety of formats to integrate and extend concepts and skills. For example, in Unit 2, Lesson 2, Get Ready, students solve four problems in which they select a clock to determine time to the nearest hour, half hour, and quarter hour. The Try It section consists of eight problems and a matching

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			activity as students tell time to the hour and half hour on an analog clock (LSSM 2.MD.C.7). In Unit 5, Lesson 4, students use a ruler to measure length in centimeters. Students learn that when they use a standard unit, such as an inch, the measurements are the same. In the Math Plus Orange Activity Book, there are four math problems where students estimate and measure objects in centimeters using a ruler (LSSM 2.MD.A.1 and 2.MD.A.2). In Unit 11, Lesson 2, students add and subtract with sums and minuends through 500. They extend this skill to include sums and minuends through 1,000. In the Math Plus Orange Activity Book, Find the Sum or Difference, students find the sum and difference by using base-10 blocks to show the starting number, then take away blocks to find the difference (LSSM 2.OA.A1, 2.NBT.B.5, and 2.NBT.B.7).
	Required **5b)** 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.	**Yes**	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 in the Get Ready section of the digital lesson. For example, in Unit 4, Lesson 2, students complete an online Skills Update where they represent numbers by using place value and consist of problems based on skills from previous grades. Students then add greater numbers, making it easier to break apart each number according to place value.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Students solve the problems by breaking apart each number into hundreds, tens, and ones, using place value to explain how they found their answer (LSSM 2.NBT.B.7 and 2.NBT.B.9). In Unit 11, Lesson 2, students complete the Find the Sum or Difference activity found in the Math Plus Orange activity book. In Grade 1, students subtracted multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (LSSM 1.NBT.C.6). Students apply and extend this prior knowledge to find the difference using base-10 blocks to show the starting number then take away blocks to find the difference (LSSM 2.OA.A.1 2.NBT.B.5, and 2.NBT.B.7). In Unit 7, Lesson 4, students solve subtraction story problems up to three digits. In Grade 1, students used subtraction within 20 to solve word problems by using objects and drawings (LSSM 1.OA.A.1). Students apply and extend this prior knowledge to find the difference using three-digit numbers. In the Math Plus Orange activity book, Sketch and Model to Subtract worksheet, problem 2, students use a sketch to solve the problem, then write the number sentence and the answer (LSSM 2.OA.A.1 and 2.NBT.B.5).
	5c) Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.	**Yes**	Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards for Grade 2. Objectives are listed for every lesson in the materials and reflect the intent and

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			language of the standards. For example, in Unit 8, Problem Solving, Lesson 1, the introductory problem models a character thinking, "Should I add or subtract to solve this story problem?" and the story problem itself states, "The Children's Playhouse sold 465 tickets Friday night and 184 tickets Saturday night. How many fewer tickets did the Children's Playhouse see on Saturday and on Friday?" Many of the terms used in the opening slide reflect the language and intent of LSSM 2.OA.B.2. Cluster B of the Operations and Algebraic Thinking (OA) domain states, "In this cluster, the terms students should learn to use with increasing precision are add, subtract, more, less, equal, equation, putting together, taking from, taking apart, addend, total, comparing, and unknown." In the lesson, students choose the number sentence that helps solve a story problem and the practice problems contain keywords such as have left, in all, how many more, and how many fewer. When the lesson transitions to having students construct number sentences to match story problems they encounter: total, minus, equals, altogether, and have left. To close the lesson, students complete paper and pencil practice to solve story problems that include: in total, and of those _____ are/how many are _____. In addition, in Unit 1, Lesson 9, the objective states, "Compare two 2-digit numbers using the symbols <, >, or =,"

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			reflecting the language and intent of LSSM 2.NBT.A.4. In Unit 4, Lesson 5, the objective states, "Add three two-digit numbers using strategies based on place value and properties of operations, with no regrouping," reflecting the language and intent of LSSM 2.NBT.B.6. In Unit 12, Lesson 8, the objective states, "Multiply within 100, using a skip counting or multiples strategy," reflecting the language and intent of LSSM 2.NBT.A.2.
6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards. ☒ Yes ☐ No	**Required** **6a)** 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.	**Yes**	Materials attend to the full meaning of each practice standard for Grade 2. The practice standards are evident in all lessons across the materials. For example, in Unit 4, Lesson 9, students engage in MP.8 when using fact family triangles to learn about the inverse relationship of addition and subtraction. In Unit 7, Lesson 4, in the Math Plus Orange Activity Book, students engage in MP.5 by using models and sketches to solve subtraction story problems. In Unit 9, Lesson 10 students engage in MP.2. When writing problems of their own, students think about all the parts needed to write a good problem. Students write a story problem, then write a number sentence to go with each story problem. In Unit 11, Lesson 14, the Unit Checkpoint emphasizes practice standards related to adding and subtracting within 1000 (LSSM 2.NBT.B.7). The problems are varied in the checkpoint and require understanding of different mathematical practices to successfully solve each

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			problem. The first problem in the checkpoint is as follows: "Which number sentence could be used to correctly solve the problem? Mary had some apples. She gave 12 apples to Amy. Now Mary has 13 apples. How many apples did Mary have in the beginning?" Students choose the appropriate equation to solve for the amount Mary began with. In this problem, students make sense of problems and persevere in solving (MP.1), reason abstractly and quantitatively (MP.2), model with mathematics (MP.4), use appropriate tools strategically (MP.5), and look for and make use of structure (MP.7). Another problem in the checkpoint requires those same mathematical practices and further requires students to construct viable arguments and critique the reasoning of others (MP.3), attend to precision (MP.6), and look for and express regularity in repeated reasoning (MP.8). The problem has the students read a story problem that includes an answer. Students have to decide if the problem was solved correctly or not by using a place value mat.
	Required **6b)** 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	**Yes**	Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key Grade 2 mathematics that is detailed in the content standards. Lessons are embedded in each unit that allow students to discuss their solution strategies and explain and critique their

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	the Standards that explicitly set expectations for multi-step problems.		reasoning. For example, in Unit 1, Lesson 9, students are given a scenario and must determine if the reasoning used in the scenario is correct. In the scenario, two girls are having a jumping contest to see who can complete the most jumps. Serena has jumped 106 times. The problem states, "Bror said that I need to jump 107 times to beat Serena. Is he right?" In Unit 3, Lesson 22, students have the opportunity to choose from the strategies they have developed to solve addition and subtraction problems. They explain their solutions and then have the opportunity to evaluate how a friend solves the same problems and determine whether or not their answers are correct. In Unit 5, Lesson 17, students construct viable arguments and critique the reasoning of others by making sense of a story problem. Students decide its type, such as part-part-total or combine, which operation to use, and how to form the equation, draw the model, and evaluate the claims of two people. In critiquing assertions and determining the correct one, students learn to justify their own assertions with proof, both abstract and concrete. Students are also tasked with explaining the reasoning and thinking about why they solve particular problems the way they do. In Unit 8, Lesson 8, students construct viable arguments and critique the reasoning of others as they evaluate different strategies used to solve the same problem in order to determine

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			which strategy is the most efficient. Students explain why they think one strategy is more effective than the other, and in doing so, they explain how their choice is easier or quicker and use specific examples to support their claim. Students also determine whether they should add or subtract to solve a story problem and explain why.
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	**Yes**	Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. The Unit Guide lists and thoroughly explains the role of the practice standards utilized in each lesson within a unit. The Unit Guide also has a section titled "Integration of Mathematical Practice Standards." The Unit Guide dives deeper into the mathematical practices with a breakdown and examples of how each mathematical practice is addressed in the units. The Unit Guide states, "These are the mathematical practice standards that are addressed in this unit with examples of how each standard is addressed." The Lesson Guides also provide information on how the practices are utilized in the lessons. The Unit 7, Unit Guide states the use of MP.1, MP.2, MP.4, MP.5, MP.7 and MP.8. Each lesson within the unit lists specific practice standards. For example, Unit 7, Lesson 3, lists use of MP.2 and MP.5. This same format is used in each unit guide throughout the materials. Each Lesson

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Guide explains the practice standard that is emphasized within the lesson and how it is utilized within the lesson. For example, the Unit 13, Lesson 2 Lesson Guide states, "Though not the only Standard for Mathematical Practice addressed in this lesson, the focus of this activity is MP.7, look for and make use of structure." In this lesson, students make use of structure in two ways. They apply their knowledge of the lines and labels on a ruler to measure the length of pencils and crayons on their activity page. They recall the need to line up the end of the ruler with the very tip of each object as they measure it in order to determine the accurate length measurement. Then, they make use of structure as they record the data on a line plot by drawing lines and labeling them with the correct range of numbers.
	6d) Materials explicitly attend to the specialized language of mathematics.	**Yes**	Materials explicitly attend to the specialized language of mathematics. The Lesson Guide lists and defines mathematical terminology under the "Keyword" section. For example, in Unit 2, Lesson 1, students are reminded of the terms analog clock and digital clock that they learned in Grade 1. When students click each term, it expands to provide a definition. This reinforcement continues throughout the lessons. Each time the terms analog clock or digital clock are used in the lesson, students have the option to click the term to review its definition. In Unit 5, Lesson 4, the keyword centimeter

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			is defined. In Unit 7, Lesson 3, the keyword subtraction sentence is defined. In Unit 9, Lesson 8, the keyword place value is defined. In the digital lesson, students use blocks and a place-value chart to learn more about place value. Students interact with these words in the Lesson Introduction of the digital lesson. Terms are written in bold, underlined purple font that are clickable in the digital lesson. In Unit 12, Lesson 1, students model multiplication with arrays. A video provides a detailed explanation and examples of arrays. Students are given the opportunity to practice modeling arrays and the term arrays is connected to the multiplication as an operation of math. The terms array and multiplication are used consistently in every component of the lesson from introduction to paper and pencil practice.
7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards. ☒ Yes ☐ No	**Required** **7a)** 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**	In the materials, students are asked to produce answers in a variety of ways. Students are asked to produce answers and solutions in arguments, explanations, diagrams, and other mathematical models. For example, in the Unit 1, Lesson 7, Practice Your Math Skills quiz, students are presented with various problem types. The first is a multiple choice problem, "Which is a true number sentence?" In this problem, students must evaluate each possible solution to identify the true number sentence. The second problem also has students evaluate possible

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			solutions, “Which subtraction problem would you solve if you counted back 7 from 16?” In the third problem, students look at an addition problem modeled with base-ten blocks. They use their knowledge of base-ten to count and combine two two-digit numbers and then type in the total amount represented. Students are also presented with paper and pencil practice for Unit 1, Lesson 7. In the Math Plus Orange Activity Book, students write numbers in expanded form, write numbers in standard form, explain in writing the value of a digit in the tens place of a number, find the sum of two three-digit numbers, choose the value of a digit in a given number, and choose the correctly written expanded form of a number. Both the online quiz and paper pencil practice contain grade-level appropriate work. The written practice provides students opportunities to write explanations and arguments. Students use multiple mathematical models to complete grade level work throughout the materials. For example, in Unit 3, Lesson 2, Math Plus Orange Activity Book, students use base-ten blocks and drawings to solve addition problems with sums through 500, with and without regrouping. Students use base-ten blocks and a place-value mat to solve the problems, such as 178+281=___. In Unit 5, Lesson 4, students use a centimeter ruler to measure an object. Then measure the object again using a

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			tape measure marked with centimeters and compare answers. Students develop the understanding that when they use a standard unit, such as an inch, the measurements are the same. On the Unit 9 Checkpoint Review, students answer a variety of questions including multiple choice, short answer, and fill-in-the-blank.
	Required **7b)** 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**	Materials provide separate teacher materials that support and reward teacher study. The materials provide teacher planning and guidance to support the instructional process. Digital teacher components are found in each unit. Each unit utilizes four tabs titled Lesson List, Materials, Advanced Prep, and Objectives. In the Lesson List tab, lessons are clickable and state whether an assessment is available for the lesson. In the Materials tab, the lesson is broken into required materials that the student, learning coach, and teacher can download or print. The Advanced Prep tab provides a pacing guide for each lesson and more explicit directives to effectively teach the lesson. The Objectives tab lists all objectives the lesson addresses. The Unit Guide provided for each unit lists lessons, standards, mathematical practices application, and graded assignments and assessments for each unit. Teaching notes are also documented in the Unit Guide. For example, in the Unit Guide for Unit 9, the Teacher Notes state, ”Ordering three numbers from least to greatest is outside

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			of the Grade 2 LSSM standard, which states that students will 'compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. Any activity tasking students with ordering three numbers is included for enrichment purposes only and will not be graded in assessments.' The guide lists the mathematical practice and fluency standards for the unit, including LSSM 2.NBT.5. The guide includes the section, Supports for English Language Learners, and identifies the resources provided within the unit. A Lesson Guide is also provided for each lesson in the materials that is broken into sections titled Prepare, Skills Update, Get Ready, Learn, and Try It, reflecting what will be taught in the student digital lesson. In the Lesson Guide, the objective, materials needed, and lesson overview are included. In the Overview, activities within the lesson are labeled as online or offline to inform the teacher where students will be working during the lesson. Keywords for the lesson are also listed on the Lesson Guide.
	7c) 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**	Materials include support for English Learners and other special populations that are thoughtful and help those students meet the same standards as all other students. The materials utilize multiple visual tools within the lesson, such as number lines and charts, to help students understand mathematical

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			processes. Each Unit Guide includes a Supports for English Language Learners section. For example, the Unit Guide for Unit 11 states that "Visual and audio supports provide students instruction without the need for strong reading comprehension and fluency. Encourage students to take advantage of audio and video where it is provided throughout the course." Specific examples are provided, such as, in Lesson 9, "students can listen to the story problems being read aloud and select their answers to the problems." The Unit Guides encourage the use of manipulatives to represent problems and concepts to help English Learners develop conceptual knowledge and vocabulary. For example, the Unit Guide for Unit 5 states, "Students have many kinesthetic opportunities to measure with rulers, tape measures, and household objects in order to explore length in inches, centimeters, feet, and meters. Additionally, there is a multi-language translation feature in every online component. Students can expand the toolbar on the top right of the page and click settings to select the language they need and the speed of the auditory playback. In order to translate the information on the screen, students click translate and are prompted to highlight the text they want translated. Next, a dialogue box appears with a translation and a play function. Students are able to click play to hear the highlighted text read

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			in the language they selected. Above the translation, students are provided with the English translation which also has an auditory playback feature so students can listen to the text in English and then listen to the text in their first language.
	7d) 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. Each lesson follows a sequence of multiple digital sections. Students develop new mathematical knowledge in the Learn It sections and apply the newly learned mathematics in the Try It sections. For example, in Unit 9, Lesson 12, students compare numbers. In the Get Ready section, students use a number line that has tick marks for the tens from 0 through 100. Students drag 30 and 70 to the correct places on the number line. In the Learn It sections, students compare and order numbers on a place value chart. At the end of the lesson, students apply this knowledge as they complete a comparing numbers assignment sheet in the Try It section. The assignment sheet starts off with two digit comparisons, such as, which number is greater 35 or 12. The assignment ends with three-digit comparisons, such as, which number is greater 781 or 881. In Unit 4, Lesson 1, students identify that addition and subtraction are opposite of each other. At the start of the lesson, students are provided addition and subtraction problems and determine how they are

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			alike and different. In the Learn section, the teacher models using counters to solve addition sentences as students follow along with their own counters. The teacher then models writing addition sentences to represent what was done with the counters. Students then write the addition sentences. Next, the teacher models beginning with the total number of counters and taking away one of the parts, and the students follow along with their own counters. The teacher models writing a subtraction sentence to represent what was done with the counters. Practice continues until students have made the connection that addition and subtraction are opposites. The teacher introduces the fact family triangle and models using it to write addition and subtraction facts belonging to the same fact family. The students follow along with the teacher. The students then engage in a paper and pencil practice from the Orange Activity Book, Opposite Operations: + and -. Student directions state, “Write two addition number sentences for the fact family triangle. Then write two related subtraction sentences.” The first two are shown as an example. Students are given 3 fact family triangles to write the fact family for. In problem 4, students are given the fact 20-6=14 and must write the related addition facts. In the Try It section, Step 1, students are presented with blank fact family triangles and must compose

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			their own fact family for each triangle then write the applicable addition and subtraction facts that are in the fact family. In Step 2, students present the fact family triangles they created along with the related facts (LSSM 2.OA.B.2).
	7e) Lessons are appropriately structured and scaffolded to support student mastery.	**Yes**	Lessons are appropriately structured and scaffold to support student mastery using a gradual release model. Each lesson is constructed of multiple sections: Introduction, Skills Update, Learn, and Try It sections. The Get Ready portion of each lesson reviews prerequisite skills from current and past grades to prepare students for the new skills. The Learn component of the lesson includes animated think aloud videos that walk through new skills with students and includes teacher modeling and guided instruction; it also provides paper and pencil practice. Last, the Try It portion of the lesson allows students to move from learning into applying new knowledge. For example, in Unit 3, Add, Subtract, Number Composition, students begin solving addition and subtraction problems through 500 with and without regrouping starting in Lessons 1 and 2. In Lessons 4 and 5, students focus on addition and subtraction fact fluency through 20. In Lessons 17 and 18, students break apart numbers to add or subtract before starting decomposition of numbers in Lessons 19 and 20. In Unit 4, Lesson 2, students develop strategies to add and subtract

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			through 500 (LSSM 2.NBT.B.7, 2.NBT.B.9). The lesson begins with a Skills Update where students use prior knowledge to practice two-digit addition problems. In the Get Ready section, students use prior knowledge to solve two-digit addition problems using different strategies, such as number lines, cubes, and books to count with. In the Learn section, students use base-ten blocks, number blocks, and place value mats to learn how to solve three-digit addition problems. Finally, in the Try It section, students work on an offline assignment where they solve problems by breaking apart numbers into hundreds, tens, and ones. Students use place value to explain how they got their answer. Unit 11, Lesson 1, begins with a skills update in which students use prior knowledge to practice solving addition and subtraction problems through a game called Space Coasters. Students solve problems and earn parts to build a roller coaster. In the Get Ready section of the lesson, students add and subtract numbers under 500. In the Learn section, students learn how to add numbers through 1,000 by using a place value chart and base 10 blocks. Finally, in the try it section, students work on an offline assignment where they use base-ten blocks and place value mats to add or subtract.
	7f) Materials support the uses of technology as called for in the Standards.	**N/A**	The LSSM does not call for use of technology for Grade 2.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
FINAL EVALUATION ***Tier 1 ratings*** receive a "Yes" for all Non-negotiable Criteria and a "Yes" for each of the Additional Criteria of Superior Quality. ***Tier 2 ratings*** receive a "Yes" for all Non-negotiable Criteria, but at least one "No" for the Additional Criteria of Superior Quality. ***Tier 3 ratings*** receive a "No" for at least one of the Non-negotiable Criteria.			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**
I: Non-negotiable Criteria of Superior Quality[4]	1. Focus on Major Work	**Yes**	Materials devote a large majority of time to the major work of the grade. In the materials, 93% of the lessons are focused on major content standards for Grade 2. Materials spend minimal time on content outside of Grade 2. In assessment materials, assessment components do not make students/teachers responsible for any topics before the grade in which they are introduced.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Materials connect two or more clusters in a domain or two or more domains in Grade 2.
	3. Rigor and Balance	**Yes**	Materials develop conceptual understanding of key mathematical concepts for Grade 2. Materials are designed so that students attain the fluencies and procedural skills required by the Standards for Grade 2. Materials are designed so that students spend sufficient time working with engaging applications for Grade 2. It is evident in the materials that the three aspects of rigor are not

[4] Must score a "Yes" for all Non-negotiable Criteria to receive a Tier I or Tier II rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			always treated together and are not always treated separately.
	4. Focus and Coherence via Practice Standards	**Yes**	Materials promote focus and coherence by connecting the practice standards with Grade 2 content.
II: Additional Criteria of Superior Quality[5]	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Materials provide all students extensive work with grade-level problems. Materials relate Grade 2 concepts explicitly to prior knowledge from earlier grades. Materials include learning objectives that are visibly shaped by LSSM cluster heading.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	Materials attend to the full meaning of each practice standard for Grade 2. Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key Grade 2 mathematics that is detailed in the content standards. Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. Materials explicitly attend to the specialized language of mathematics.
	7. Indicators of Quality	**Yes**	In the materials, students are asked to produce answers in a variety of ways. Materials provide separate teacher materials that support and reward teacher study. The instructional materials provide teacher planning and guidance to support the instructional process. Materials include support for English Language Learners and other special populations

[5] Must score a "Yes" for all Additional Criteria of Superior Quality to receive a Tier I rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			that are thoughtful and help those students meet the same standards as all other students. The underlying design of the materials distinguishes between problems and exercises. Lessons are appropriately structured and scaffolded to support student mastery using a gradual release model.
FINAL DECISION FOR THIS MATERIAL: **Tier I, Exemplifies quality**			

Instructional materials are one of the most important tools educators use in the classroom to enhance student learning. It is critical that they fully align to state standards—what students are expected to learn and be able to do at the end of each grade level or course—and are high quality if they are to provide meaningful instructional support.

The Louisiana Department of Education is committed to ensuring that every student has access to high-quality instructional materials. In Louisiana all districts are able to purchase instructional materials that are best for their local communities since those closest to students are best positioned to decide which instructional materials are appropriate for their district and classrooms. To support local school districts in making their own local, high-quality decisions, the Louisiana Department of Education leads online reviews of instructional materials.

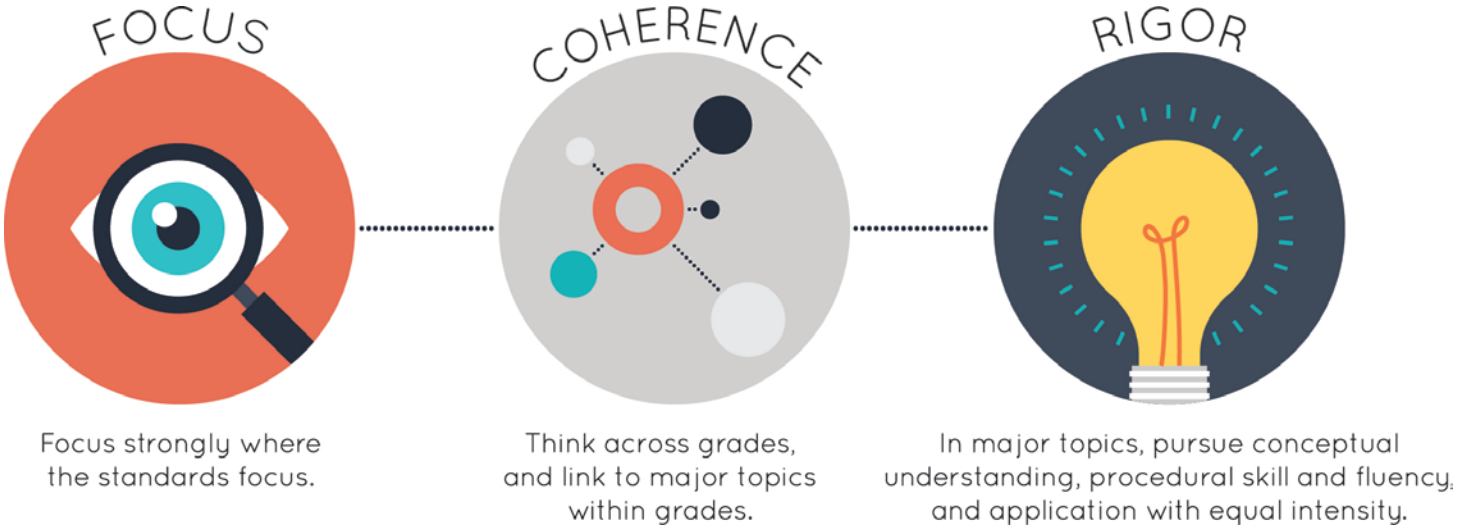
Instructional materials are reviewed by a committee of Louisiana educators. Teacher Leader Advisors (TLAs) are a group of exceptional educators from across Louisiana who play an influential role in raising expectations for students and supporting the success of teachers. Teacher Leader Advisors use their robust knowledge of teaching and learning to review instructional materials.

The 2019-2020 Teacher Leader Advisors are selected from across the state and represent the following parishes and school systems: Ascension, Beauregard, Bossier, Caddo, Calcasieu, Caldwell, City of Monroe, Desoto, East Baton Rouge, Einstein Charter Schools, Iberia, Jefferson, Jefferson Davis, KIPP New Orleans, Lafayette, Lafourche, Lincoln, Livingston, LSU Lab School, Orleans, Orleans/Lusher Charter School, Ouachita, Plaquemines, Pointe Coupee, Rapides, Richland, RSD Choice Foundation, St. John the Baptist, St. Charles, St. James, St. Landry, St. Mary, St. Tammany, Tangipahoa, Vermillion, Vernon, West Baton Rouge, West Feliciana, and Zachary. This review represents the work of current classroom teachers with experience in grades K-5.

Appendix I.

Publisher Response

Strong mathematics instruction contains the following elements:



Title: **Math+Green Summit LA**

Grade/Course: **1**

Publisher: **K12 Inc.**

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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 and Coherence via Practice Standards (Non-negotiable)	
5. Alignment Criteria for Standards for Mathematical Content	
6. Alignment Criteria for Standards for Mathematical Practice	
7. Indicators of Quality	

To evaluate instructional materials for alignment with the standards and determine tiered rating, begin with **Section I: Non-negotiable Criteria**.

- Review the **required**[1] Indicators of Superior Quality for each **Non-negotiable** criterion.
- If there is a "Yes" for all **required** Indicators of Superior Quality, materials receive a "Yes" for that **Non-negotiable** Criterion.
- If there is a "No" for any of the **required** Indicators of Superior Quality, materials receive a "No" for that **Non-negotiable** Criterion.
- Materials must meet **Non-negotiable** Criterion 1 and 2 for the review to continue to **Non-negotiable** Criteria 3 and 4. Materials must meet all of the **Non-negotiable** Criteria 1-4 in order for the review to continue to Section II.
- If materials receive a "No" for any **Non-negotiable** Criterion, a rating of Tier 3 is assigned, and the review does not continue.

If all Non-negotiable Criteria are met, then continue to **Section II: Additional Criteria of Superior Quality.**

- Review the **required** Indicators of Superior Quality for each criterion.
- If there is a "Yes" for all **required** Indicators of Superior Quality, then the materials receive a "Yes" for the additional criteria.
- If there is a "No" for any **required** Indicator of Superior Quality, then the materials receive a "No" for the additional criteria.

Tier 1 ratings receive a "Yes" for all Non-negotiable Criteria and a "Yes" for each of the Additional Criteria of Superior Quality.
Tier 2 ratings receive a "Yes" for all Non-negotiable Criteria, but at least one "No" for the Additional Criteria of Superior Quality.
Tier 3 ratings receive a "No" for at least one of the Non-negotiable Criteria.

[1] **Required Indicators of Superior Quality** are labeled "**Required**" and shaded yellow. Remaining indicators that are shaded white are included to provide additional information to aid in material selection and do not affect tiered rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES	Publisher's Response
Section I: Non-negotiable Criteria of Superior Quality **Materials must meet all of the Non-negotiable Criteria 1-4 in order for the review to continue to Section II.**				
Non-negotiable **1. FOCUS ON MAJOR WORK[2]:** Students and teachers using the materials as designed devote the large majority[3] of time to the major work of the grade/course. ☒ Yes ☐ No	**Required** **1a)** 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.	**Yes**	Materials devote a large majority of time to the major work of the grade. In the materials, 90% of the lessons are focused on major content standards for Grade 1. The major work for Grade 1 is focused on Operations and Algebraic Thinking (OA) and Number and Operations in Base Ten (NBT) of the Louisiana Student Standards for Mathematics (LSSM). An example of major work within the grade is found in Unit 5, Lesson 1; students are given a two-digit number and mentally find 10 more or 10 less than the number without having to count (LSSM 1.NBT.C.5). In Unit 8, Lesson 7, students add and subtract within 20, demonstrating fluency for addition and subtraction within 10, understand the meaning of the equal sign, and determine the unknown whole number in an addition or subtraction equation that relates three whole numbers (LSSM 1.OA.B.4, 1.OA.C.6, 1.OA.D.7, 1.OA.D.8).	

[2] For more on the major work of the grade, see Focus by Grade Level.
[3] 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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	Required **1b)** 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.	**Yes**	Materials spend minimal time on content outside of the appropriate grade level. In assessment materials, assessment components do not make students/teachers responsible for any topics before the grade level in which they are introduced. For example, in Unit 3, Lesson 12, Unit Checkpoint Assessment, students use addition and subtraction within 20 to solve word problems, apply properties of operations to add and subtract, relate counting to addition and subtraction, understand the meaning of the equal sign, determine the unknown whole number in an addition or subtraction equation that relates three whole numbers, and add within 100 (LSSM 1.OA.A.1, 1.OA.C.5, 1.NBT.C.4.a, 1.OA.B.3, 1.OA.D.7, 1.OA.D.8, and 1.OA.C.6). In Unit 4, Lesson 7, Unit Checkpoint Assessment, students add and subtract within 20, demonstrating fluency for addition and subtraction within 10 (LSSM 1.OA.C.6).	
Non-negotiable **2. CONSISTENT, COHERENT CONTENT** Each course's instructional materials are coherent and consistent with the content in the Standards. ☒ Yes ☐ No	**Required** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. In Grade 1, there are two supporting clusters, 1.MD.C and 1.MD.D. In Unit 12, Lesson 3, students answer the following problem in the Try It section of the lesson: "Count by tens, fives, or ones to find the value of the group of coins. Write the value on the line." The groups of coins have the same value, aligning to supporting LSSM 1.MD.D.5 and	

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			connecting to major LSSM 1.NBT.A.1. In Unit 16, Lesson 7, students sort objects into 2 groups, then circle the objects that belong in one group and cross out the objects that belong in the other group. For example, one question asks students to circle the numbers that are less than fifty and cross out the numbers that are greater than fifty. This lesson connects supporting LSSM 1.MD.C.4 to major LSSM 1.NBT.B.3. Another example is evidenced in Unit 17, Lesson 3, in which students compare measurements, connecting supporting standard LSSM 1.MD.A.1 to major standard LSSM 1.NBT.A.1.	
	Required **2b)** 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.	**Yes**	Materials connect two or more clusters in a domain or two or more domains in Grade 1. For example in Unit 1, Lesson 6, students learn to skip count by 10s through 100 using a numberline and hundreds chart, connecting clusters A and B of the Number and Operations in Base Ten (NBT) domain (LSSM 1.NBT.A.1 and 1.NBT.B.2c). In Unit 3, Introduction to Addition, connections are made between the Operations and Algebraic Thinking (OA) and Number and Operations in Base Ten (NBT) domains. For example, in Unit 3, Lesson 2, students relate counting to addition and subtraction (LSSM 1.OA.C.5) by adding two-digit numbers (LSSM 1.NBT.C.4a) as they use cubes and drawings to solve "A group of 14 combined with a group of 12." The Operations and Algebraic Thinking (OA) and Number and	

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			Operations in Base Ten (NBT) domains are also connected in Unit 13. In Unit 13, students add and subtract using objects and sketches and identify different ways to add and subtract. Students find the sum of two numbers through 100 (LSSM 1.NBT.4) and solve word problems using drawings (LSSM 1.OA.A.1). Specifically, in Lesson 11, students add a two-digit number with a one-digit number using base ten blocks. Unit 11, Lesson 3 connects clusters A and C of the Operations and Algebraic Thinking (OA) domain. For example, students solve the following problem: "19 − 5 is equal to 14. Write three other expressions that show 14." Students add and subtract within 20 using the relationship between addition and subtraction to write equations equal to 14, aligning to LSSM 1.OA.A.1 and 1.OA.C.6.	
Non-negotiable **3. RIGOR AND BALANCE:** Each grade's instructional materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application. ☒ Yes ☐ No	**Required** **3a)** ***Attention to Conceptual Understanding:*** Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts for Grade 1. The curriculum utilizes 17 units to build conceptual understanding throughout Grade 1. For example, in Unit 3, Lesson 1, students begin to develop conceptual understanding of addition by finding the sum of two numbers using a part-part-whole worksheet and two different color cubes (LSSM 1.OA.A.1). In Units 4 and 6, this understanding continues to build as students add and subtract within 20, using strategies such as making ten, counting on, or decomposing a number leading to ten	

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			(LSSM 1.OA.C.6). In Unit 7, Lesson 4, students determine the unknown whole number in an addition or subtraction equation that relates three whole numbers using cubes as needed (LSSM 1.OA.D.8). Students first understand that the value on one side of an equal sign must be the same value of the other side by completing an activity with a balance. Students add cubes to one side of the balance to make both sides equal and then find the missing addend in a number sentence. Students then apply this understanding in the Finding Missing Numbers activity sheet. Students use cubes to model the number sentence and write the missing numbers for problems such as 8+_=14 and 15=6+_. Subtraction is developed through six of the 17 units. For example, in Unit 8, Lesson 1, students begin to develop conceptual understanding of subtract using drawing and objects. In the Learn section of the digital lesson, students manipulate pictures of grasshoppers to solve the word problem "2 grasshoppers leapt from the log. Take away 2 grasshoppers from the group of 6. How many grasshoppers are left on the log?" Later, in Unit 8, students continue to build understanding by using one-to-one correspondence with objects in order to subtract in the problem, "There are 4 black cats and 7 white cats. How many less is 4 than 7?" (LSSM 1.OA.C.6).	

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	Required **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	Materials are designed so that students attain the fluencies and procedural skills required by the standards for Grade 1. Students have the opportunity to practice fluency in the "Skills Update" section of any digital lesson. In Unit 3, Lesson 2, Skills Update, students engage in LSSM 1.NBT.A.1, when answering "Write the number fifty-four"; "Write the numbers fifty-eight through sixty-eight"; and "What number comes after 83?" In Unit 6, Lesson 4, students fluently add within 20 when completing the "Sum Bug" activity during the digital lesson (LSSM 1.OA.C.6). In Unit 11, Lesson 5, Skills Update, students solve subtraction problems for fluency as they engage in a digital game called Space Coaster (LSSM 1.OA.C.6). The objective of the game is to fluently subtract numbers in order to build a roller coaster. In some of the Unit Guides, the fluency standards that are embedded in the units are listed under a section titled "Fluency;" however, several unit guides include guidance that incorrectly identifies fluency standards. For example, in the Unit 8 Guide under "Fluency," guidance states that "The following fluency standards are embedded throughout unit 8," and includes LSSM 1.OA.C.6, 1.OA.D.7, and 1.OA.D.8. Although these standards are addressed in Lessons 1, 3, 4, 7, 8, 9, 10, 11, and 12; the guidance incorrectly identifies LSSM 1.OA.D.8 as a fluency standard. Other examples include LSSM 1.NBT.C.5 in Unit 9	Standards called out in the Unit Guides were intended to reflect those identified in the Louisiana Focus Documents as "FLUENCY EXPECTATIONS OR EXAMPLES OF CULMINATING STANDARDS." We've updated our Unit Guides to better reflect this categorization.

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			and Unit 13, LSSM 1.OA.A.1 in Unit 12, and LSSM 1.OA.D.8 in Unit 13, 14, 15, and 16.	
	Required **3c) *Attention to Applications:*** 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.	**Yes**	Materials are designed so that students spend sufficient time working with engaging applications for Grade 1. Grade 1 has three application standards, LSSM 1.OA.A.1, 1.OA.A.2, and 1.MD.C.4. Units 14 and 15 focus on addition and subtraction word problems within 20 using equations, blocks, and diagrams as they add to, take from, put together, take apart and compare numbers. For example, in Unit 14, Lesson 5, Skill Sheet, students apply knowledge of subtraction to answer "The book return at the library contains 62 books. 20 are children's books. The rest are adult books. How many adult books are in the book return?" (LSSM 1.OA.A.1). In Unit 14, Lesson 9, students solve the following problem, "Faith had some crayons. She gave her brother 5 crayons. Now she has 9 crayons. How many crayons did she have at the beginning?" Students are provided a start unknown equation along with counters to model and solve the problem (LSSM 1.OA.A.2 and 1.OA.A.2). In Unit 15, Lesson 4, students solve the following problem, "So far, 15 boys and 23 girls have entered the water park. How many more boys would have to enter to have the same number of boys as girls? Which number sentence shows what is happening in this problem?" Students are provided the choices 15 + 23 =? And 23 = 15 + ? (LSSM 1.OA.A.1). Additionally, in	

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			Unit 5, Lesson 6, students use cubes to show three different ways to make a number. For example, students show 3 ways to make 16, including one way with three addends, and two ways with two addends. Students apply this understanding as they solve word problems on the Skill Sheet involving 3 whole numbers, such as "A bag has 3 red marbles. It has 2 blue marbles. It has 4 purple marbles. How many marbles are there in all?" and "A box has 6 blue blocks. It has 3 pink blocks. It has 2 yellow blocks. How many blocks are in the box?" (LSSM 1.OA.A.2). Another example of students engaging in application is in Unit 16, Lesson 8, as students create a tally chart to model "Carla has a bag of marbles. In her bag, Carla has 3 blue marbles, 5 red marbles, and 2 yellow marbles." Students use the chart they created to answer "Which color marble does Carla have the most of?" and "How many marbles are in Carla's bag?" (LSSM 1.MD.C.4).	
	Required **3d)** ***Balance:*** The three aspects of rigor are not always treated together and are not always treated separately.	**Yes**	It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately. The balance of rigor is apparent in the design of the curriculum as each lesson in the curriculum has multiple sections to develop Grade 1 standards. The three components of rigor can be found in different parts of the lesson. For example, in the Skills Update and Get Ready sections, students have an opportunity to	

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			work with fluency standards for Grade 1. In Unit 16, Lesson 2, students focus on the conceptual understanding of putting shapes together to form new shapes (LSSM 1.G.A.2). Unit 16, Lesson 9 incorporates all three components of rigor as students use pictures and graphs to show information and then compare the data shown in the pictures and graphs (LSSM 1.MD.C.4). For example, in the Try It section, students organize data about gym toys in a picture graph and answer how many questions, including more or less questions. In Unit 12, Lesson 5, students order objects by length combining conceptual understanding and procedural skill and fluency (LSSM 1.MD.A.1). In Unit 1, Lesson 4, students engage in conceptual understanding and procedural skill and fluency. In the Get Ready section, students fluently count to 50. Then students engage in three Learn sections that develop conceptual understanding when counting using a numberline. Students finally apply their understanding of counting when answering "Count from 38 to 78" in the Try It section of Lesson 4 (LSSM 1.NBT.A.1).	
Non-negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.	**Required** **4a)** 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.	**Yes**	Materials promote focus and coherence by connecting the practice standards with Grade 1 content. A Unit Guide accompanies each unit and lists the practice standards that are addressed within each lesson of that unit. In the Unit Guide, on the right hand side of the page,	

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☒ Yes ☐ No			Standards for Mathematical Practice are listed for the lesson. In addition, the guide breaks down each mathematical practice, explains how they are addressed in the unit, and provides examples in the "Integration of Mathematical Practice Standards" section of the guide. For example, Unit 7, Lesson 4 states that the lesson will emphasize MP.1, 2, and 4 as students "using a balance model and cubes, find the missing addend in a number sentence." In Unit 7, Lesson 5, students utilize MP.1, 2, and 4 as they use cubes and a number line to find the missing addend in an addition number sentence (LSSM 1.OA.D.8). Additionally, in Unit 7, Lesson 6, students look for and make use of structure (MP.7) as they add frogs and realize that no matter of the order they add them in, the total remains the same, which can be applied to any number combination (LSSM 1.OA.D.8.). In Unit 12, Lesson 7, students engage in MP.2 and MP.6, after reading an e-book in which they compare objects using nonstandard measurements to compare items (LSSM 1.MD.A.1). In Unit 15, Lesson 4, students use appropriate tools strategically (MP.5) and look for and express regularity in repeated reasoning (MP.8) as they identify whether or not the question is asking to make equal parts, then find the number sentence needed to answer the question, and finally use base ten blocks to solve the	

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			problems (LSSM 1.OA.A.1, 1.OA.D.8, 1.NBT.C.4).	
Section II: Additional Criteria of Superior Quality				
5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: 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. ☒ Yes ☐ No	**Required** **5a)** 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.	**Yes**	Materials provide all students extensive work with grade level problems. Students solve grade level problems in each lesson within the curriculum. The lessons in the curriculum are broken into several sessions with options for additional practice in a printed version. The materials provide students the opportunity to work with problems in a variety of formats to integrate and extend concepts and skills. For example, in Unit 2, Lesson 2, there are 30 problems for students to solve in the Learn It and Try It sections. In the lesson, students work on telling time to the hour and half hour on analog and digital clocks (LSSM 1.MD.B.3). In Unit 3, Lesson 8, students solve 27 problems within the lesson to determine the unknown sum in an addition equation with a box that represents the unknown (LSSM 1.OA.D.8). In Unit 5, Lesson 5, students work on using methods such as counting on and using a number line or hundreds chart to find the sum in the following problem: "Coleman has 4 cookies. His friend gives him 5 more. Count on from 4 to find how many cookies Coleman has in all." (LSSM 1.OA.C.6). In Unit 13, Lesson 6, students work 18 problems in the lesson using base 10 blocks to model two-digit numbers in different ways and begin to understand	

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			regrouping, reflecting the intent of LSSM 1.NBT.B.2.	
	Required **5b)** 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.	**Yes**	Materials relate Grade 1 concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that students connect prior knowledge to new concepts in the Get Ready section of the digital lesson. For example, the Unit 10, Lesson 2, the Get Ready section begins with the practice of writing addition and subtraction sentences to represent everyday situations to connect previously learned skills so that students will be able to use addition facts to find the difference in related subtraction problems (LSSM 1.OA.B.4). In kindergarten, students learned to solve addition and subtraction problems within 10 using objects and drawings (LSSM K.OA.A.2). In Grade 1, students build upon this knowledge to find unknown addends in problems using commutative and associative properties (LSSM 1.OA.B.3). For example, in Unit 5, Lesson 8, students add three numbers by grouping the addends in the following problem, "5 + 6 + 4=." In kindergarten, students compared the length of two objects with a measurable attribute in common to see which object had more or less, then described the difference. In Grade 1, Unit 12, Lesson 5, students build upon prior knowledge to	

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			order three objects by length and compare the lengths of two objects indirectly by using the third object (LSSM 1.MD.A.1). In kindergarten, students learned how to add and subtract up to 5 (LSSM K.OA.A.5). Grade 1 builds on this in the beginning of the year by using the "count on" strategy utilized in Unit 5, Lesson 5. In that lesson, students add 23 + 4 on the Try It workbook pages. Students start at 23 and then count on to 27 (LSSM 1.OA.C.6).	
	5c) Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.	**Yes**	Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards for Grade 1. For example, in Unit 2, Lesson 2, students identify time to the hour using a digital clock and analog clock, reflecting the language and intent of LSSM 1.MB.B.3. In Unit 11, Lesson 4, the objective states "Determine the unknown subtrahend in a subtraction equation with a symbol representing the unknown, limited to three numbers, minuends less than or equal to 20," reflecting the language of LSSM 1.OA.A.1. In Unit 8, Lesson 3, the objectives state for students to "identify the number that is one more than a given number; explain the meaning of addition or subtraction symbol; represent subtraction using objects, drawings, or explanations, limited to minuends up to 10." The objectives match the language and intent for addition in standards LSSM 1.OA.B.3 and 1.OA.C.6. The objective for Unit 12, Lesson 5 includes "order three	

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			objects according to length," reflecting the language and intent of LSSM 1.MD.A.1. In Unit 16, Lesson 2, students "compose a composite two-dimensional shape using rectangles, squares, trapezoids, triangles, half-circles, and/or quarter-circles; Decompose a composite two-dimensional shape into rectangles, squares, trapezoids, triangles, half-circles, and /or quarter circles," reflecting the language of LSSM 1.G.A.2.	
6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards. ☒ Yes ☐ No	**Required** **6a)** 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.	**Yes**	Materials attend to the full meaning of each practice standard for Grade 1. For example, in Unit 10, Lesson 11, students answer "From your daily life, find three examples of subtraction that you can solve using strategies you learned in this unit." Students describe each example using one to two sentences, state the strategy they used to solve the subtraction problem, and explain why they chose that strategy to solve the subtraction problem. The prompted questions help students realize that doing mathematics involves solving problems, and discussing how they solve them demonstrates use of MP.1 (Make sense of problems and persevere in solving them). In Unit 9, Lesson 3, students engage in MP.2 (Reason abstractly and quantitatively) when using online flashcards for subtraction facts with minuends through 20 using mental strategies. In Unit 11, Lesson 6, students engage in MP.5 (Use appropriate tools strategically) when determining which	

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			subtraction strategy can be used to find the missing numbers in a subtraction sentence. In Unit 12, Lesson 1, students engage in MP.6 (Attend to precision) when describing coins by color, sizes, and picture to name and compare coins. In Unit 13, Lesson 2, students engage in MP.7 (Look for and make use of structure) when grouping objects into tens and ones to identify the number of tens and ones in each group of pictures in the Learn section of the digital lesson. In Unit 1, Lesson 6, students engage in MP.8 (Look for and express regularity in repeated reasoning) when counting by 10s through 100 and skip counting by tens and fives to complete a pattern. In doing this, students learn to look for repeated reasoning as every number they say begins or ends in a similar or patterned way. Another example of MP.8 is found in Unit 13, Lesson 9, when students learn to make groups of 10 to add two numbers. The teacher has students place 14 circles on one sheet of paper and 20 on another sheet. The teacher is prompted to state, "To add 14 and 20, move all the circles to the last sheet of paper and count them." Then the teacher asks, "What is 14 plus 20?" Continuing to do this repetitively allows students to see the relationship with tens and ones. For example, 1 ten and 2 tens will be 3 tens and 4 ones and 0 ones is 4 ones, for a total sum of 34.	

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	Required **6b)** 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.	**Yes**	Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key Grade 1 mathematics that is detailed in the content standards. Each lesson has a Try-Learn Routine. There are lessons embedded in each unit that allow students to discuss their solution strategies, explain and critique their reasoning. For example, in Unit 13, Lesson 8, students use cards 0-9 to create two-digit numbers. Students then discuss with a partner which number created is larger. When both students agree, a comparison symbol is recorded. Students explain to the partner a rule for comparing numbers using vocabulary words such as tens and ones and record their work. In the Unit 3, Lesson 10 Reflection section, students discuss their reasoning for creating number sentences containing certain numbers with a partner, then reflect on the meaning of the equal symbol and compare it to a balance. Students evaluate the accuracy of their work and articulate their understanding of symbols in writing. In Unit 4, Lesson 5, students construct viable arguments at the end of the quiz when describing the problems, the strategies used to solve the problem, and the reasons why they chose the strategy as they derived answers to the problems. In Unit 13, Lessons 8, 13, and 15, students make claims and defend or critique claims of others. For example, in Lesson 8,	

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			students form a rule determining whether a two-digit number is larger or smaller than another based on trials with a partner. They utilize specific terms to form the rule. In Lesson 15, students explain how and why they chose specific strategies in the digital lesson. They identify strategies used by a fictitious student and explain how the student solved the problem. In the Unit Guide, there are activities to engage students in problem solving. For example, in Unit 5, students engage in a task in which they collect 20-30 items and then separate the collection into 3-4 groups by type, color, etc. The teacher is prompted to "ask students to count the number of rocks in each group and write it on the outside of each baggie." The teacher then prompts the discussion by asking students how many rocks they have in all. Students are to count on to find the total amount. If time permits, the teacher is to ask students to separate their collection in a different way. The students record a number sentence for their work. The teacher is prompted to ask, "Which two groups would you add first? Why?"	
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	**Yes**	Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. The Unit Guide lists and explains thoroughly the role of the practice standards utilized in each lesson within a unit. The Unit	

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			Guide also has a section titled "Integration of Mathematical Practice Standards." The Unit Guide states, "These are the mathematical practice standards that are addressed in this unit with examples of how each standard is addressed." The Unit 10 Unit Guide states the use of MP.1, MP.2, MP.3, MP.4, MP.6 and MP.7. Each lesson within the unit lists specific math practice standards. For example, Unit 10, Lesson 10, lists use of MP.1 and MP.2. This same format is used in each Unit Guide throughout materials. Each Lesson Guide explains the MP that is focused on within that lesson and how it is utilized within the lesson. For example, the Unit 5, Lesson 2 Lesson Guide details "Although there are other Standards for Mathematical Practice addressed in this lesson, the focus of this activity is MP.5: Use appropriate tools strategically. In this activity, students use a number line in order to find 'one more.' Students learn that they count to the right one increment when they do this. They observe the relationship between two numbers that are one unit away from each other. In the future, students can use similar visual and tactile guides to help them keep track of their increasing numbers."	
	6d) Materials explicitly attend to the specialized language of mathematics.	**Yes**	Materials explicitly attend to the specialized language of mathematics. The Lesson Guide lists and defines mathematical terminology under the "Keyword" section. For example, in Unit 3,	

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			Lesson 8, Lesson Guide, the keywords listed are "addition sentence: a number sentence that involves addition only" and "equality: state of being equal." Students interact with these words in the Lesson Introduction of the digital lesson. In Unit 7, Lesson 2, students engage with the term "expressions" in the Learn section of the digital lesson. In Unit 13, Lesson 3, Lesson Guide, lesson vocabulary states use of "tens rod," "ones cube," and "place value." In Unit 13, Lesson 8, students will "describe the meaning of the numbers 10, 20, 30, 40, 50, 60, 70, 80, or 90, as the composition of one, two, three, four, five, six, seven, eight, or nine 10s, using words, pictures or objects" (LSSM 1.NBT.B.2). Terms are written in bold, underlined purple font that are clickable in the digital lesson. Once clicking on the word, a pop up box appears on the screen with a definition and examples of the term. For example, in Unit 16, Lesson 8, the following words are bold on the Student Version, "tally chart, bar graphs, and data," drawing attention to the terminology used to discuss organizing data in charts and graphs. Students are able to click on the word and read the definition that is displayed on the screen (LSSM 1.MD.C.4).	
7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to give teachers and students the	**Required** **7a)** 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**	In the materials, students are asked to produce answers in a variety of ways. Students are asked to produce answers and solutions in arguments, explanations, diagrams, and other mathematical models.	

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tools they need to meet the expectations of the Standards. ☒ Yes ☐ No	arguments and explanations, diagrams, mathematical models, etc.		For example, in Unit 7, Lesson 4, students begin with a digital lesson to find a missing addend. Students manipulate a digital scale to engage in the following problem: "Add cubes to the right side of the balance to make both sides equal and and match the expression, 5 + 2 = 7." Within the same lesson, students use hands-on manipulatives, such as cubes, to work problems on a worksheet. On the Unit 7 Checkpoint, students answer a variety of questions including multiple choice and fill-in-the-blank. Another example is evidenced in Unit 14, Lesson 1, students fill-in the blanks with correct answers. Students model the problems using base ten blocks to solve addition problems. In Unit 14, Lesson 14, students determine if the word problem is a comparing problem, then select the number sentence used to answer the problem. In Unit 17, students complete a unit project by composing two-dimensional shapes to create composite shapes, measuring lengths, comparing lengths, and using addition and subtraction for problem solving.	
	Required **7b)** 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	**Yes**	Materials provide separate teacher materials that support and reward teacher study. The instructional materials provide teacher planning and guidance to support the instructional process. The digital teacher components are found in each unit. Each unit utilizes four tabs titled "Lesson List," "Materials," "Advanced Prep," and "Objectives." In the "Lesson	

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	of desired mathematical behaviors being elicited among students.		List" tab, lessons are clickable and state if an assessment is available for the lesson. In the "Materials" tab, the lesson is broken into required materials that the student, learning coach, and teacher can download or print. The "Advanced Prep" tab provides a pacing guide to each lesson and more explicit directives to effectively teach the lesson. The "Objectives" tab lists all objectives the lesson will address. The Unit Guide provided for each unit lists lessons, standards, mathematical practices application, and graded assignments and assessments for each unit. Teaching notes are also documented in the Unit Guide. For example, in Unit 15, Unit Guide, the teaching note states, "The First Grade LSSM limits word problem addition and subtraction to 20. Problems in this unit involving word problem addition and subtraction beyond 20 are for enrichment purposes and are not included in assessments." The guide details the fluency standards to be addressed within the unit, as well as pinpoints difficult concepts for misconceptions. An area within the Unit Guide titled "Supports for English Language Learners" identifies the resources provided within the unit. A Lesson Guide is also provided for each lesson in the materials that is broken into sections titled "Prepare," "Skills Update," "Get Ready," "Learn," and "Try It," reflecting what will be taught in the student digital lesson. In the Lesson Guide,	

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			the objective, materials needed, and lesson overview are included. In the Overview, activities within the lesson are labeled as "online" or "offline," to inform the teacher where students will be working during the lesson. Any keywords for the lesson are also listed on the Lesson Guide.	
	7c) 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**	Materials include support for English Language Learners and other special populations that is thoughtful and can help those students meet the same standards as all other students. The materials utilize multiple visual tools within the lesson such as number lines and charts to help students understand mathematical processes. In Unit 8, Lesson 1, students are introduced to the concept of subtraction. To help visualize and understand the concept of subtraction, taking away, students watch videos that illustrate subtraction problems, such as a group of six grasshoppers sitting on a log and two hopping away to show 6 – 2. When new vocabulary is introduced, students have access to defined pop-ups that can be read and reviewed throughout the lesson. Lessons and problems can be read aloud using audio technology by clicking the "Read" button. For example, in Unit 13, Lesson 1, colorful animated slides are provided, called "Tens, Ones, and Estimation," to demonstrate with insects how to count by tens using ten frames. Support for English Language Learners is	

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			provided in the Unit Guides. For example, in Unit 7, support includes "Manipulatives, such as cubes, household objects, crayons, and other items students use to represent problems and concepts, will help English language learners develop their conceptual knowledge and vocabulary. Throughout unit 7, cube trains are used to provide students with the opportunity to compare and combine addends. Encourage students to talk about the cube trains as they touch them and look at them."	
	7d) 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. Each lesson follows a sequence of multiple digital sections. Students develop new mathematical knowledge in the Learn sections and apply the newly learned mathematics in the Try It sections. For example in Unit 8, Lesson 5, students compare expressions (LSSM 1.OA.D.7). In the Learn section, students watch a video in which cubes are used to model expressions to help them determine if the expressions are equal. In the Try It section, students complete work online by clicking correct answers from a list to solve three problems such as "Which number sentence means the same as 4 + 3 = 7?" In the next Learn section, students engage in an online activity in which they will select the missing number to make two expressions equal. In the Try It section, students complete eight problems on an	

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			offline worksheet. Some lessons include Learn it workbook pages followed by Try it workbook pages. Additional worksheets in the form of documents are also included to allow students adequate practice of newly learned skills. For example, in Unit 13, Lesson 14, students learn to compare two subtraction strategies, counting back on a number line and breaking apart numbers, and then apply this learning in a practice worksheet. (LSSM 1.OA.C.6 and 1.NBT.C.4).	
	7e) Lessons are appropriately structured and scaffolded to support student mastery.	**Yes**	Lessons are appropriately structured and scaffolded to support student mastery using a gradual release model. Each lesson is constructed of multiple sections, Introduction, Skills Update, Learn, and Try It. In Unit 1, Lesson 7, students use the symbols for less than, equal to, or greater than to compare and order whole numbers through 100 (LSSM 1. NBT.B.3). The lesson begins with a connection to prior knowledge of comparing objects in the Get Ready section. Students engage in a fluency practice, answering taller/shorter and more than/less than questions in the Skills Update section. In the Learn section, students manipulate household items, such as straws, to work problems prompted by the online teacher. Finally, in the Try It section, students work on an offline worksheet to compare numbers independently. Additionally, in Unit 7, Lesson 2, students review different ways to show a number (LSSM 1.OA.C.6) in the	

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			Get Ready section. This activity helps students prepare to add two or more numbers. Students attempt the problem "Draw 4 red stars, a plus symbol, 1 blue star, another plus symbol, and 1 yellow star, followed by an equal symbol." Then students respond to "What number do these pictures show?" Later, in Lesson 7, students make trains using unit cubes. Students use 9 red and 7 blue for 9 + 7. Students determine how many cubes there are. If the trains are flipped, putting blue first, students determine if the total changes. This leads into finding missing addends for 9 + 7 = _ + 9.	
	7f) Materials support the uses of technology as called for in the Standards.	**N/A**	The LSSM does not call for use of technology for Grade 1.	
FINAL EVALUATION ***Tier 1 ratings*** receive a "Yes" for all Non-negotiable Criteria and a "Yes" for each of the Additional Criteria of Superior Quality. ***Tier 2 ratings*** receive a "Yes" for all Non-negotiable Criteria, but at least one "No" for the Additional Criteria of Superior Quality. ***Tier 3 ratings*** receive a "No" for at least one of the Non-negotiable Criteria.				
Compile the results for Sections I and II to make a final decision for the material under review.				
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**	
I: Non-negotiable Criteria of Superior Quality[4]	1. Focus on Major Work	**Yes**	Materials devote a large majority of time to the major work of the grade. In the materials, 90% of the lessons are focused on major content standards for Grade 1. Materials spend minimal time on content outside of Grade 1. In assessment materials, assessment components do not make students/teachers responsible for	

[4] Must score a "Yes" for all Non-negotiable Criteria to receive a Tier I or Tier II rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES	Publisher's Response
			any topics before the grade in which they are introduced.	
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Materials connect two or more clusters in a domain or two or more domains in Grade 1.	
	3. Rigor and Balance	**Yes**	Materials develop conceptual understanding of key mathematical concepts for Grade 1. Materials are designed so that students attain the fluencies and procedural skills required by the Standards for Grade 1. Materials are designed so that students spend sufficient time working with engaging applications for Grade 1. It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately. However, some of the Unit Guides incorrectly identify standards as fluency standards within the "Fluency" section, such as LSSM 1.OA.D.8 in Unit 8, LSSM 1.NBT.C.5 in Unit 9 and Unit 13, LSSM 1.OA.A.1 in Unit 12, and LSSM 1.OA.D.8 in Unit 13, 14, 15, and 16.	Standards called out in the Unit Guides were intended to reflect those identified in the Louisiana Focus Documents as "FLUENCY EXPECTATIONS OR EXAMPLES OF CULMINATING STANDARDS." We've updated our Unit Guides to better reflect this categorization.
	4. Focus and Coherence via Practice Standards	**Yes**	Materials promote focus and coherence by connecting the practice standards with Grade 1 content.	
II: Additional Criteria of Superior Quality[5]	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Materials provide all students extensive work with course-level problems. Students solve grade level problems in each lesson within the curriculum. Materials relate	

[5] Must score a "Yes" for all Additional Criteria of Superior Quality to receive a Tier I rating.

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			Grade 1 concepts explicitly to prior knowledge from earlier grades and courses. Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards for Grade 1.	
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	Materials attend to the full meaning of each practice standard for Grade 1. Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key Grade 1 mathematics that is detailed in the content standards. Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. Materials explicitly attend to the specialized language of mathematics	
	7. Indicators of Quality	**Yes**	In the materials, students are asked to produce answers in a variety of ways. Materials provide separate teacher materials that support and reward teacher study. The instructional materials provide teacher planning and guidance to support the instructional process. Materials include support for English Language Learners and other special populations that are thoughtful and help those students meet the same standards as all other students. The underlying design of the materials distinguishes between problems and exercises. Lessons are appropriately structured and scaffolded to support	

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES	Publisher's Response
			student mastery using a gradual release model.	
FINAL DECISION FOR THIS MATERIAL: **Tier I, Exemplifies quality**				

Appendix II.

Public Comments

There were no public comments submitted.