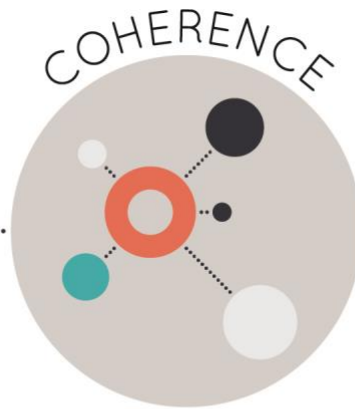




Strong mathematics instruction contains the following elements:



Focus strongly where the standards focus.



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



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

Title: **Math Online Resource Bundles**

Grade/Course: **6-8, Algebra 1**

Publisher: **Spider Learning, Inc.**

Copyright: **2018**

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

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

STRONG	WEAK
	1. Focus on Major Work (Non-Negotiable)
	2. Consistent, Coherent Content (Non-Negotiable) *
	3. Rigor and Balance (Non-Negotiable)
	4. Focus Coh. via Practice Std (Non-Negotiable) **
	*Strong at Grade 8
	**Strong at Grades 6 and 7

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 6 \(Tier 3\)](#)

[Grade 7 \(Tier 3\)](#)

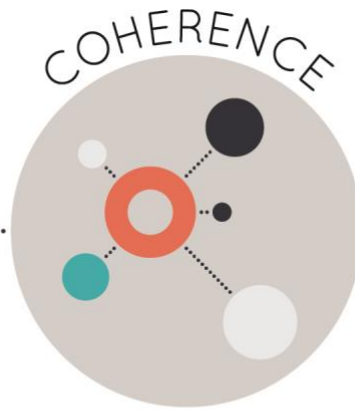
[Grade 8 \(Tier 3\)](#)

[Algebra 1 \(Tier 3\)](#)

Strong mathematics instruction contains the following elements:



Focus strongly where the standards focus.



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



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

Title: Math Online Resource Bundles

Grade/Course: 6

Publisher: Spider Learning, Inc.

Copyright: 2018

Overall Rating: Tier III, Not representing quality

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

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

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

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

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

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
<p>Non-Negotiable 1. FOCUS ON MAJOR WORK¹: Students and teachers using the materials as designed devote the large majority² of time to the major work of the grade/course.</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>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.</p>	<p>No</p>	<p>The materials do not devote a majority of class time to the major work of the grade.</p> <p>As evident in the “Scope and Sequence,” there are a total of 180 lessons divided into two semesters, where 144 of those lessons are instructional and 36 are assessment related. Seventy-four (51.39%) of these lessons focus on major content of the grade, 24 (16.67%) focus on supporting content, and 42 (29.17%) of the 144 instructional lessons focus on additional content for Grade 6.</p> <p>Lessons 1-4 in Unit 4, Semester B, focus on scatter plots, guided by Louisiana Student Standards for Math (LSSM) 8.SP.A.1, which is outside of the scope for Grade 6. LSSM 6.SP.A.2 is not addressed in the curriculum materials. There are 9 lessons listed as aligned to LSSM 6.NS.A.1, where students “interpret and compute quotients of fractions.” Units 1 and 2 of Semester A focus on LSSM 6.NS.A.1; however, Lessons 11-14 in Unit 1 focus on converting between fractions and decimals, comparing and ordering fractions, and simplifying fractions. These concepts do not align to LSSM 6.NS.A.1.</p>
	<p>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.</p>	<p>No</p>	<p>The instructional materials introduce assessment items that are outside the limitations of the LSSM for Grade 6. For example, in Unit 2 of Semester B, students “choose which graph has the greater absolute deviation.” In another question, students determine the greater absolute deviation between two sets of data. The topic of absolute deviation is a concept that is introduced in Grade 7 (LSSM 7.SP.B.3). Another example of assessing students before they are introduced to the math concept appears in the Unit 4, Semester B assessment. Questions prompt students calculate the mean absolute value from a list of temperatures given in a chart. Knowledge and understanding of “absolute deviations” are necessary to complete these</p>

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

² The materials should devote at least 65% and up to approximately 85% of class time to the major work of the grade with Grades K–2 nearer the upper end of that range, i.e., 85%.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			questions and are not introduced in the Grade 6 standards.
<p>Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course’s instructional materials are coherent and consistent with the content in the Standards.</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>REQUIRED 2a) Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.</p>	<p>No</p>	<p>The materials do not consistently connect supporting content to major content in a meaningful way that maintains focus and coherence within the grade.</p> <p>When major standards (LSSM 6.NS.C.8) and supporting standards (LSSM 6.G.A.3) are taught concurrently it improves the focus and coherence within the grade. However, these standards are not taught together. For example, LSSM 6.G.A.3 is introduced and practiced in Lessons 4, 6, and 7 of Unit 3, Semester B; however, LSSM 6.NS.C.8, the introduction of finding the distance between points on the coordinate grid in all quadrants, is not addressed until Lessons 12-14 of Unit 5. The curriculum treats these standards as separate concepts although they are closely related. Additionally, important connections among LSSM 6.EE.A.3, 6.EE.B.6, 6.G.A.1, and 6.G.A.4 are missing. Students could make the connections by providing the opportunity to develop an algebraic expression to represent the surface area of prisms, as opposed to providing the formula in instruction during Unit 3 of Semester B.</p>
<p>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.</p>	<p>No</p>	<p>The materials do not consistently include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade/course, in cases where these connections are natural and important.</p> <p>The units provide alignment to standards from multiple domains, but connections are not made. This is evident in Unit 1, Semester B, Lesson 1 where 6.EE.B.7 is listed, but students are to solve two step equations, which are problems outside the requirements of the LSSM for Grade 6.</p> <p>Lessons 2-4 are aligned to LSSM 6.RP.A.3c, and students identify and solve proportions, but these activities are outside of the LSSM for Grade 6.</p>	

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Lessons 6-9 focus on LSSM 6.EE.C.9, where students analyze relationships and use variables to write equations that represent the relationship between dependent and independent variables. While all of these standards belong to different domains or clusters, the lessons do not connect the content within.
<p>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.</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>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.</p>	<p>No</p>	<p>The materials do not develop the conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards. The materials frequently provide direct instruction which focuses on vocabulary, one approach to solving problems, and repetition of similar problems. In addition, there are limited problems to help develop the understanding of a concept.</p> <p>For example, in Unit 4, Semester A, Lesson 7, students input missing values in a table. The instructions provide a step by step approach to find the missing values to make equivalent ratios. Yet, there is no emphasis on why or activities to investigate the concept. Thus, students cannot engage in the full intent of LSSM 6.RP.A.3a, which calls for conceptual understanding.</p> <p>Also, in Unit 2, Semester B, Lesson 11, addressing LSSM 6.SP.A, students begin with vocabulary then match statements to the correct term. They answer a question that assesses their understanding of the vocabulary, and then order graphs from least to greatest variability, with the focus on vocabulary.</p> <p>Students must solve problems, but lack the opportunity to show an understanding of the mathematics or explain their reasoning. The activities highlight vocabulary and getting to an answer, instead of demonstrating an understanding of concepts.</p>
	<p>REQUIRED 3b) Attention to Procedural Skill and Fluency: The</p>	<p>Yes</p>	<p>The materials are designed so that students attain the fluencies and procedural skills required by the</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p>materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.</p>		<p>LSSM.</p> <p>Unit 1, Semester A, Lessons 1-3 provide fluency practice to find common factors and multiples of whole numbers and fractions. These lessons help prepare students to engage in the major work of Grade 6, which entails understanding ratios and proportional relationships. Although there were no specific discussions about the relationship between understanding how and when to use common factors, it is implied that students will need the understanding to generate equivalent ratios and to determine if proportionality exists between given ratios. Additionally, Unit 1 focuses on procedural skills such as dividing multi-digit numbers, where fluency in this skill is required by supporting content (LSSM 6.NS.B.2). Unit 1, Semester A, Lesson 1 provides additional scaffolding to develop the standard algorithm, followed by a post test and "Daily Assignment," where students have the opportunity to practice and assess this newly learned skill. Additionally, the "Weekly Quiz" for Unit 1 provides a review section to promote additional practice to assess understanding before assessment.</p>
	<p>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.</p>	<p>No</p>	<p>The materials do not allow teachers and students to spend sufficient time working with engaging applications, nor does the curriculum provide non-routine problems that develop the mathematics of the grade/course and engage students in problem-solving.</p> <p>For example, Unit 2, Semester A, Lessons 2-6 focus on LSSM 6.NS.A.1, "Interpret and compute the quotients of fractions." Problems are routine in nature and rarely require students to use math knowledge to determine when it is appropriate to use the correct operation. Additionally, there is a lack of variety in single and multi-step problems that would help develop the practice of application in this standard. For example, Question 3 in the Unit 2, Semester A, Lesson 3 posttest states, "Terry has 7</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>feet of string that she cut into pieces that are 721 of a foot long. How many pieces of string does Terry have?" The answer choices include, "Terry has 21 pieces of string" and "Terry has 21 feet of string." There is no opportunity for students to use mathematical reasoning to make decisions. The answer choices limit the student's need to make any real math application decisions. The student can correctly answer by choosing the right unit. Other questions in this posttest lack the requirement for students to explain how the quotient is derived. Another example is found in Unit 6, Semester A, Lessons 11-14, with the focus on LSSM 6.EE.B.7, "Solve real-world and mathematical problems by writing and solving equations and inequalities of the form $x + p = q$ and $px = q$ for cases in which p, q and x are all nonnegative rational numbers." The summative "Time to Review" problems for these lessons provide fill-in-the-blank type questions where students are given a bank of quantities to use. Additionally, in the "Practice Activity," students are provided all information, including expressions and equations, and are to respond using drag and drop responses already created, select answers from a dropdown menu, or order the steps in a given process. This structure does not reach the full intent of the application of LSSM 6.EE.B.7. The unit exam for Unit 6 provides basic recall multiple choice questions and the same types of dropdown, drag and drop, and ordering steps in a process as the "Time to Review" and "Practice Activity" portions of the unit materials. However, Question 38 of the Unit 6 exam is a multi-step, non-routine, problem that allows students to demonstrate understanding of the skill and concept by applying their knowledge with no additional assistance.</p>
	<p>REQUIRED 3d) Balance: The three aspects of rigor are not always treated together and are not always treated separately.</p>	<p>No</p>	<p>The Grade 6 content materials do not address the three components of rigor in an adequate balance.</p> <p>For example, LSSM 6.NS.A.1 is aligned to all components of rigor, but procedural skill and fluency is the primary focus of the instructional</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>lessons. For example, Units 1 and 2, Semester A, focus on LSSM 6.NS.A.1, with one lesson (Unit 2, Lesson 2) that focuses on the application of skills. All problems in the “Daily Assignment” provide guidance on how to calculate the answer or are a drag-and-drop or multiple-choice questions where the choices are given. Conceptual understanding is not addressed fully. The second component of Unit 2, Semester A, Lesson 2 provides visual models to represent division of fractions by whole numbers to build conceptual understanding, but provides direct instruction that the division of fractions is completed through inverse operations. There is no development or connection made between division of fractions by whole numbers and division of fractions by another fraction. In the “Daily Assignment” for Lesson 3, the two questions designed to assess student mastery of LSSM 6.NS.A.1 are Questions 2 and 6. In Question 6, students can solve the problem by identifying the operation needed to solve the problem. This major content standard specifically states that students are to use visual models or equations to help explain their reasoning. The lack of opportunity to solve division problems involving fractions through application limits the ability to master LSSM 6.NS.A.1.</p>
<p>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.</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>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.</p>	<p>Yes</p>	<p>The materials address the practice standards in such a way as to enrich the content standards of the grade.</p> <p>Many of the mathematical practices are embedded within lessons where it is most fitting and appropriate. For example, the curriculum embeds Math Practice 1 by having students conceptualize the meaning of content within each lesson and encourages them to develop strategies to aid in solving math tasks within the lesson.</p> <p>Each lesson provides an opportunity for students to develop an understanding of how to solve problems utilizing prior knowledge. For example, in Unit 1,</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>Semester B, Lesson 1, students use knowledge of variables to develop strategies to solve equations with variables. Although the math practices are not stated explicitly in either the teacher content or student content, each lesson includes recommendations to use MP.1 and MP. 4. This is evident in Unit 3, Semester A , Lesson 7, when students find distance by using a number line (LSSM 6.NS.C.6) in the “Daily Assignment” and the post test. The lesson begins with encouraging students to write their explanation of how rational numbers can be ordered using a number line or other tool. Students then examine how distance can be found using an equation or coordinate grid.</p> <p>Math practices are never explicitly stated in either the teacher or student materials. In addition, the “Scope and Sequence” does not document the correlation to the mathematical practice standards.</p>
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
<p>Additional Criterion 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.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	<p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	<p>5c) Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p>Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>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.</p>	<p>Not Evaluated</p>	<p>This section was not evaluated because the non-negotiable criteria were not met.</p>
	<p>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.</p>	<p>Not Evaluated</p>	<p>This section was not evaluated because the non-negotiable criteria were not met.</p>
	<p>6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.</p>	<p>Not Evaluated</p>	<p>This section was not evaluated because the non-negotiable criteria were not met.</p>
	<p>6d) Materials explicitly attend to the specialized language of mathematics.</p>	<p>Not Evaluated</p>	<p>This section was not evaluated because the non-negotiable criteria were not met.</p>
<p>Additional Criterion 7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>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.</p>	<p>Not Evaluated</p>	<p>This section was not evaluated because the non-negotiable criteria were not met.</p>
	<p>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</p>	<p>Not Evaluated</p>	<p>This section was not evaluated because the non-negotiable criteria were not met.</p>

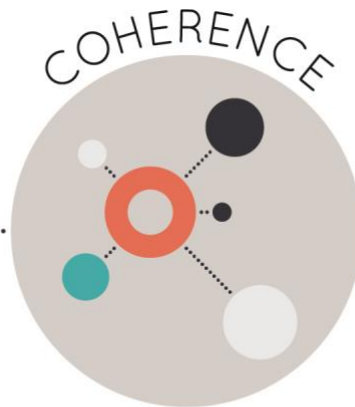
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	ways of thinking and anticipating a variety of student responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.		
	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.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	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.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	7e) Lessons are appropriately structured and scaffolded to support student mastery.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	7f) Materials support the uses of technology as called for in the Standards.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
FINAL EVALUATION <i>Tier 1 ratings</i> receive a “Yes” in Column 1 for Criteria 1 – 7. <i>Tier 2 ratings</i> receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one “No” in Column 1 for the remaining criteria. <i>Tier 3 ratings</i> receive a “No” in Column 1 for at least one of the non-negotiable criteria.			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	No	The majority of time is not devoted to the major work of the grade/course. Only 74 (51.39%) of lessons focus on major content for Grade 6, 24 (16.67%) of the lessons focus on supporting content, and 42 (29.17%) of the 144 instructional lessons focus on additional content for Grade 6. Assessment materials in some units make students responsible for topics beyond the scope of the LSSM for Grade 6.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	2. Consistent, Coherent Content	No	Materials do not connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Materials do not consistently 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.
	3. Rigor and Balance	No	Instructional materials attend to the development of procedural skills and fluency, but lack the development of conceptual understanding, application, and the balance among the three aspects.
	4. Focus and Coherence via Practice Standards	Yes	Materials promote focus and coherence by connecting practice standards with content that is emphasized in the LSSM.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	6. Alignment Criteria for Standards for Mathematical Practice	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	7. Indicators of Quality	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: <u>Tier III, Not representing quality</u>			

Strong mathematics instruction contains the following elements:



Focus strongly where the standards focus.



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



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

Title: Math Online Resource Bundles

Grade/Course: 7

Publisher: Spider Learning, Inc.

Copyright: 2018

Overall Rating: Tier III, Not representing quality

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

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

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

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

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

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
<p>Non-Negotiable</p> <p>1. FOCUS ON MAJOR WORK³: Students and teachers using the materials as designed devote the large majority⁴ of time to the major work of the grade/course.</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>REQUIRED</p> <p>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.</p>	No	<p>The materials do not devote a majority of class time to the major work of the grade.</p> <p>As evident in the “Scope and Sequence,” there are a total of 180 lessons divided into two semesters, where 144 of those lessons are instructional and 36 are assessment related. Fifty-nine (40.97%) of these lessons focus on major content, 21 (14.58%) focus on supporting content, and 45 (31.25%) of the 144 instructional lessons focus on additional content for Grade 7.</p> <p>Nineteen of the 144 (13.19%) instructional lessons focus on content below grade level, including lessons aligned to Louisiana Student Standards for Math (LSSM) 4.G.A.1-2, 6.NS.6c, 6.EE.2b, 6.RP.3a, and 6.SP.4-5.</p>
	<p>REQUIRED</p> <p>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.</p>	No	<p>The instructional materials spend more than minimal time on content outside of the LSSM for Grade 7. For example, 19 instructional lessons (13%) focus on standards from previous grades. In addition, there are assessment components that make students responsible for topics before the grade in which they are introduced. For example, in Unit 1, Semester A, students “define what a natural number is.” The concept of classifying rational and irrational numbers, specifically identifying natural, whole, and integers is not introduced until LSSM 8.NS.A.1. Other questions on the Unit 1 exam state, “Would you classify the number -0.05 as a rational number, integer, or whole number? Why is it under this classification? Is it under the same classification as 0.05? Why or why not?” These questions make students and teachers responsible for content that is introduced in LSSM 8.NS.A.1, which is beyond the scope of Grade 7. The Unit 6, Semester B exam contains at least three questions where students identify situations that are linear, analyze data in a table to determine which is linear, and create a</p>

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

⁴ The materials should devote at least 65% and up to approximately 85% of class time to the major work of the grade with Grades K–2 nearer the upper end of that range, i.e., 85%.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>linear equation given a constant rate and initial fee. However, linear functions are not addressed until LSSM 8.F.A.3, “Interpret the equation $y=mx+b$ as defining a linear function...categorize functions as linear or nonlinear when given equations, graphs, or tables.” Assessment questions also have students calculate surface area or volume of cylindrical objects. The LSSM in which surface area and volume are addressed, LSSM 7.G.B.6, states that the learner is to focus on “...two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.” Question 11 on the Lesson 10 “Weekly Quiz” in Unit 4, has students determine if two graphs represent direct variation and then to compare slopes (LSSM 8.EE.B.5). In Question 12, from the same assessment, students identify an equation that represents direct variation, which is not introduced until LSSM 8.F.A.3.</p>
<p>Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course’s instructional materials are coherent and consistent with the content in the Standards.</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>REQUIRED 2a) Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.</p>	<p>Yes</p>	<p>The materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year in Grade 7</p> <p>For example, in Unit 1, Semester B, students operate with rational numbers (LSSM 7.NS.A.3) to solve problems involving area, surface area, and volume of three- dimensional figures (LSSM 7.G.B.6). As they progress through the lessons, the types of rational numbers utilized also progress. The “Daily Assignments” for Lessons 1, 2, and 3 of Unit 2 include whole number measurements in which operations are performed. Lessons 4 and on begin to include rational numbers such as fractions, mixed numbers, and decimals to continue to support fluency of LSSM 7.NS.A.3. Lesson 9 in Unit 3, Semester B, is aligned to LSSM 7.SP.C.6 and includes an explicit explanation of how using a proportion can help predict the future occurrence of an event. Additionally, the lesson posttest includes opportunities to use proportions to solve problems. For example, Question 1 states, “The probability of rolling a sum of 3 when rolling two six-sided dice is</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			1/16. How many times would you expect to roll a sum of 3 if you roll the dice 80 times?" Greater focus and coherence can be achieved when proportional reasoning is used to determine probability.
	<p>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.</p>	No	<p>The materials do not consistently include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade/course, in cases where these connections are natural and important.</p> <p>While individual units are listed as aligned to standards within multiple domains or clusters, these concepts are often taught in isolation. This is evident in Unit 2, Semester A, Lesson 4, "Unit Test," where LSSM 7.NS.A.1 and 7.NS.A.2, which require fluency in computation are connected to real-world problem-solving in LSSM 7.EE.A.3. For example, in the Unit 2, Semester A, Lesson 4, "Daily Assignment" a question states, "The batting cage charges Lila an entrance fee of \$2.25 and \$3.75 an hour for every hour she is there. The total cost for 4.5 hours can be expressed as: $2.25 + 3.75(4.5)$." Although the question addresses fluency in computing rational numbers, it does not require that the student assess the reasonableness of the answer to fully attend to LSSM.7.EE.A.3. In addition, Unit 4, Semester A, Lessons 1-6, focus on solving one- and two-step inequalities and graphing the solution set (LSSM 7.EE.B.4). Then Lessons 7-9 move to instruction on "Direct Variation," and are listed as aligned to LSSM 7.RP.A.2, followed by two lessons that apply skills within LSSM 7.EE.B.4. Lessons 13 and 14 then focus on expressing and comparing ratios and fractions in lowest terms, as aligned to LSSM 6.RP.A.3 and 7.EE.B.3. There are no explicit, significant connections made between these concepts.</p>
<p>Non-Negotiable 3. RIGOR AND BALANCE: Each grade's instructional materials reflect the balances in the Standards and help students meet</p>	<p>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</p>	No	<p>The materials do not develop the conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards. The materials frequently provide direct instruction which focuses on vocabulary, one approach to solving problems, and repetition of</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p>the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application.</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>featuring high-quality conceptual problems and discussion questions.</p>		<p>similar problems. In addition, there are limited problems to help develop the understanding of a concept.</p> <p>For example, Unit 5, Semester A, Lesson 11, students determine whether two quantities are in a proportional relationship(LSSM 7.RP.A.2a). The instructions address this concept procedurally and encourage students to cross multiply ratios to see if the result is the same. However, this detracts from the understanding and emphasizes a particular skill over understanding. Later in the lesson, students are to plot points on a coordinate graph but are instructed to say that they are proportional if they create a straight line through the origin. There is no instruction or opportunity to discuss what this means or why.</p> <p>Students must solve problems, but lack the opportunity to show an understanding of the mathematics or explain their reasoning. The activities highlight vocabulary and focus on getting to an answer, instead of demonstrating an understanding of concepts.</p>
	<p>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.</p>	<p>Yes</p>	<p>The materials are designed so that students attain the fluencies and procedural skills required by the LSSM.</p> <p>Unit 4, Semester A, Lesson 6, sets the expectation that students will need to use a multitude of operations in order to solve real-life problems. The material also gives explanations of the algorithm when problem-solving to help students understand why the order of problem-solving works. An example of this is evident in the Unit 4, Semester A, Lesson 6 posttest which prompts the student to, "Highlight the part of this inequality that you would address first when solving: $2x+9>21$." These procedural problems help students develop the skill necessary to master LSSM 7.EE.B.4, which involves solving two-step inequalities with variables and graphing the solution. Major content standard</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>7.RP.A.1 is aligned directly to the procedural skill and fluency component of rigor. Lessons 2, 3, and 6 of Unit 5, in Semester A focuses on computing unit rates with whole number, decimal, and fraction values. Along with a three- question posttest at the end of each lesson, there are six additional procedural problems in each “Daily Assignment.” In the Lesson 5 “Weekly Quiz,” there are 20 problems in the Time to Review,” as well as, twelve more in the “Practice Activity” section.</p>
	<p>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.</p>	<p>No</p>	<p>The materials do not allow teachers and students to spend sufficient time working with engaging applications, nor does the curriculum provide non-routine problems that develop the mathematics of the grade/course and engage students in problem-solving.</p> <p>For example, LSSM 7.RP.A.3 states “Use proportional relationships to solve multi-step ratio and percent problems.” To reach the full intent of this standard students must use procedural fluency and apply learning to solve real-world problems. Unit 5, Semester A, Lesson 7 aligns to LSSM 7.RP.A.3 but does not allow the application of skills. The problems given in the post test for the lesson engage students in using proportions to calculate the percent given the part and whole, the part given the percent and whole, or the whole given the percent and part. Unit 5, Semester A, Lesson 5, “Solve Real-World Ratio and Percent Problems Using Proportions,” is misaligned to LSSM 7.RP.A.2a. This lesson, along with the unit exam and review problems, provide real-world scenarios, but include items where students put steps of a process in order, fill in the blank with given options, and respond to one- or two-step problems. There is no multi-step, non-routine, problem found that allows students to demonstrate understanding of the skill and concept by applying their knowledge without assistance from the curriculum. Additionally, the materials aligned to LSSM 7.NS.A.3 provide minimal opportunity to engage in non-routine application</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>problems. There are 3 lessons that involve multi-step problem-solving with all four operations with rational numbers in the program: Lessons 1 and 9 of Unit 2, Semester A, and Lesson 2 of Unit 6, Semester B. Questions are asked such as, “Harper has $2\frac{1}{3}$ cups of sugar in the kitchen. The recipe for chocolate chip cookies calls for $1\frac{1}{2}$ cups of sugar. Harper would like to make 2 batches of cookies. Does she have enough sugar for the double batch?” While this problem features an example of a routine application of the standard, no other non-routine, multi-step, problems were identified.</p>
	<p>REQUIRED 3d) Balance: The three aspects of rigor are not always treated together and are not always treated separately.</p>	<p>No</p>	<p>The Grade 7 content materials do not address the three components of rigor in an adequate balance.</p> <p>For example, LSSM 7.EE.B.3 and 7.EE.B.4 are aligned to all components of rigor, and are primarily addressed in Units 3 and 4, Semester A. The lessons and assessments that are aligned to these standards focus heavily on procedural skill and fluency. For example, the posttest and “Daily Assignment” for Unit 3, Lesson 14, “Solving Real-World Problems Using Linear Equations,” focus heavily on the steps to determine the answer to a real-world situation. On Question 1 of the post test, students order steps from first to last to solve the given situation. On Questions 1, 2, and 3 of the “Daily Assignment” students are asked, “what 4 represents in the problem,” identify “charge per hour” and “highlight the value that represents the cost to get into the carnival.” These questions address reading comprehension, not mathematical understanding, fluency, or application. Additionally, the instructional materials for LSSM 7.NS.A.3 meet the requirements of conceptual understanding and procedural fluency almost exclusively. In the Unit 6, Semester B, Lesson 2 posttest, students are presented with the following problem, “Jessica bought two new shirts. The black shirt was \$8.65 plus 15% off. The orange shirt was \$9.30 plus an extra 20% off. Match the shirts to the correct sale price.” There is a lack of balance in rigor and non-</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p>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.</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>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.</p>	<p>Yes</p>	<p>routine, multi-step problems necessary to achieve mastery of the Grade 7 LSSM.</p> <p>The materials address the practice standards in such a way as to enrich the content standards of the grade.</p> <p>Many of the mathematical practices are embedded within lessons where it is most fitting and appropriate. For example, each lesson begins with a discussion of the objectives and asks students to understand the meaning of the problems presented and think of specific strategies that will help solve the problems, which aligns to MP. 1. Additionally, Unit 4, Semester A, Lesson 7, encourages students to use the most precise terminology by defining terms such as, “direct variation” and “origin,” which is an application of MP. 7. Mathematical Practice Standard 2, to “reason abstractly and quantitatively,” is seen in Unit 4 of Semester A, within the “Weekly Quiz” for Lesson 10, where in “Question 2” students demonstrate their understanding of “direct variance” by conceptualizing the variables of a situation. The question has students use the constant of proportionality to model the scenario with symbols (MP.4).</p> <p>Some instructional lessons do not develop the ability to reason abstractly and quantitatively (MP. 2) due to the lesson design where direct instruction is prevalent with formulas, procedures, and interpretation of values. This is evident in Unit 5, Semester A, Lesson 12, where the first example identifies the constant of proportionality, the value of the unit rate, and interprets the meaning of this value for the student. There are no interactive components for the student to give meaning to the equation themselves.</p> <p>With the majority of assessment items found in the lesson posttests, “Weekly Quizzes,” and unit exams written as drag and drop, multiple choice, and</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			matching items, there are limited opportunities to “construct viable arguments and critique the reasoning of others” (MP. 3) within the curriculum.” Math practices are never explicitly stated in either the teacher or student materials. In addition, the “Scope and Sequence” does not document the correlation to the mathematical practice standards.
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
<p>Additional Criterion 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.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	<p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	<p>5c) Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
<p>Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards.</p>	<p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	<p>REQUIRED 6b) Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<input type="checkbox"/> Yes <input type="checkbox"/> No	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.		
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	6d) Materials explicitly attend to the specialized language of mathematics.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
Additional Criterion 7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards. <input type="checkbox"/> Yes <input type="checkbox"/> 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.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	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.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	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.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	7d) The underlying design of the materials distinguishes between problems and exercises. In essence, the	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.

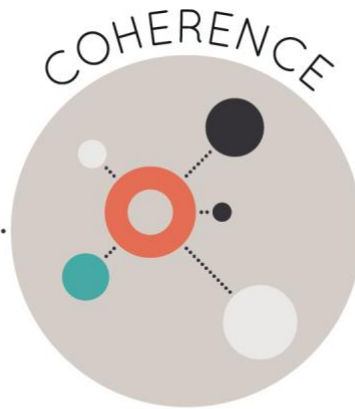
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.		
	7e) Lessons are appropriately structured and scaffolded to support student mastery.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	7f) Materials support the uses of technology as called for in the Standards.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
FINAL EVALUATION			
<i>Tier 1 ratings</i> receive a “Yes” in Column 1 for Criteria 1 – 7.			
<i>Tier 2 ratings</i> receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one “No” in Column 1 for the remaining criteria.			
<i>Tier 3 ratings</i> receive a “No” in Column 1 for at least one of the non-negotiable criteria.			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	No	The majority of time is not devoted to the major work of the grade/course. Only 59 (40.97%) of lessons focus on major content for Grade 7, 21 (14.58%) of the lessons focus on supporting content, and 45 (31.25%) of the 144 instructional lessons focus on additional content for Grade 7. In addition, 19 of the 144 (13.19%) instructional lessons focus on content below grade level.
	2. Consistent, Coherent Content	No	Materials do not connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Materials do not consistently 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.
	3. Rigor and Balance	No	Instructional materials attend to the development of procedural skills and fluency, but lack the development of conceptual understanding, application, and the balance among the three aspects.
	4. Focus and Coherence via Practice Standards	Yes	Materials promote focus and coherence by connecting practice standards with content that is emphasized in the LSSM.

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

Strong mathematics instruction contains the following elements:



Focus strongly where the standards focus.



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



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

Title: Math Online Resource Bundles

Grade/Course: 8

Publisher: Spider Learning, Inc.

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Overall Rating: Tier III, Not representing quality

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

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

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

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

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

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
<p>Non-Negotiable</p> <p>1. FOCUS ON MAJOR WORK⁵: Students and teachers using the materials as designed devote the large majority⁶ of time to the major work of the grade/course.</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>REQUIRED</p> <p>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.</p>	No	<p>The materials do not devote a majority of class time to the major work of grade.</p> <p>As evident in the “Scope and Sequence,” there are a total of 180 lessons divided into two semesters, where 144 of those lessons are instructional and 36 are assessment related. Seventy-four (51.39%) of these lessons focus on major content, 43 (29.86%) focus on supporting content, and 8 (5.56%) of the 144 instructional lessons focus on additional content for Grade 8.</p> <p>Nineteen of the 144 (13.19%) instructional lessons focus on content above or below grade level, including lessons aligned to Louisiana Student Standards for Math (LSSM) 6.EE.A.1, 7.EE.B.4, A-CED.A.1, A-CED.A.2, A-CED.A.3, A-REI.B.3, A-REI.B.4, F-IF.A.1, F-IF.A.2, S-ID.C.8, N-RN.A.2, and N.RN.B.3.</p>
	<p>REQUIRED</p> <p>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.</p>	No	<p>The instructional materials introduce assessment items that are outside the limitations of the LSSM for Grade 8. For example, 8 out of 12 instructional lessons in Unit 4, Semester A, are devoted to content from the Algebra I LSSM. Students are responsible for these standards in weekly tests, in lesson posttests, and in the unit test. For example, in Unit 4, Semester A, Lesson 5, one question on the lesson quiz states, “For each of the two expressions below, determine whether it is a rational or irrational number and explain your reasoning.” The two expressions listed are, “$\sqrt{4x} \sqrt{8}$ and $\sqrt{3x} \sqrt{9}$.” Students are responsible for understanding that performing operations with rational numbers will produce answers that are rational. This understanding aligns with LSSM N-RN.B.3, an Algebra I standard. The Unit 4, Lesson 14 posttest states, “Place the following steps in the correct order for solving $2\sqrt[3]{(x-1)+3}=11$.” This question aligns with LSSM A.REI.B.4, as stated in the Grade 8, Semester A, “Scope and Sequence” document. The</p>

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

⁶ The materials should devote at least 65% and up to approximately 85% of class time to the major work of the grade with Grades K–2 nearer the upper end of that range, i.e., 85%.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>“Weekly Quiz,” in Unit 4 of Semester B, also contains assessment items that are outside the requirements of the LSSM for Grade 8. For example, questions 16 and 17 have students determine points on a line of reflection that is not the x- or y-axis. However, LSSM 8.G.A.2 and 8.G.A.3 both state that, “reflections are only over the y-axis and x-axis” and “rotations are only about the origin.” Question 18 has students determine the location of a horizontal bisector, a term that is not in the scope of Grade 8 content. One question, on the Unit 4, unit exam, has students determine the slope of the line of reflection for two given points; while another, has students rotate around a point other than the origin.</p>
<p>Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course’s instructional materials are coherent and consistent with the content in the Standards.</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 2a) Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.</p>	<p>Yes</p>	<p>The materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year in Grade 8.</p> <p>For example, in Unit 1, Semester B, the “Introduction to Functions” provides major content (LSSM 8.F.A.1) while also providing instruction on how to represent functions graphically and how to qualitatively describe them (LSSM 8.F.B.4 and LSSM 8.F.B.5, respectively). These concepts are addressed in Unit 1, Semester B, Lesson 7, where students determine if a relationship is a function, and continue in the next two lessons to cover supporting content standards (LSSM 8.F.B.4 and 8.F.B.5). Additionally, these concepts are addressed in Unit 1, Semester B, Lesson 4, “Finding Exact and Approximate Lengths,” and in Unit 3, Semester B, supporting content (LSSM 8.NS.A.2), “Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions,” connects to major content (LSSM 8.EE.B.2), “Use square root and cube root symbols to represent solutions to equations... Know that $\sqrt{2}$ is irrational,” by having students solve for missing lengths, and estimate the value of these lengths for a given triangle in context.</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p>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.</p>	<p>Yes</p>	<p>The order of instructional lessons enhances the focus and coherence of the content. Critical instructional time is maximized by bringing together related topics in one unit.</p> <p>The 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, such as with LSSM 8.F.A.1 and 8.F.B.4.</p> <p>Since LSSM 8.F.A.1 states that students are expected to understand that functions are rules that state that each x-value produces only one y-value, a natural extension of this understanding includes students identifying the slope to create a function graphically. This connection is made in Lessons 7 and 8, Unit 1, Semester B. In Lesson 7, students are instructed on how to determine if a set of ordered pairs is a function, which aligns to LSSM 8.F.A.1. In Lesson 8, students are instructed on how to represent functions in tables, graphs or maps, which aligns to 8.F.B.4. However, an important connection is missing in Unit 6, Semester B, where Lesson 12 focuses on functions and identifying functions given a graph, equation, table, or set of ordered pairs. While there is focus on major standards (LSSM 8.F.A.1, 8.F.A.2, and 8.F.A.3), this content could be enhanced and connected to other major standards such as, LSSM 8.EE.B.6, “derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b,” by having students construct the equation of a given linear function, or identify the slope and y-intercept of a graph, instead of stating that it is a “diagonal line,” as required in Question 3 of the “Daily Assignment” in Lesson 12.</p>
<p>Non-Negotiable 3. RIGOR AND BALANCE: Each grade’s instructional materials reflect the balances in the Standards and help students meet</p>	<p>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</p>	<p>No</p>	<p>The materials do not develop the conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards. The materials frequently provide direct instruction which focuses on vocabulary, one approach to solving problems, and repetition of</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p>the Standards’ rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application.</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>featuring high-quality conceptual problems and discussion questions.</p>		<p>similar problems. In addition, there are limited problems to help develop the understanding of a concept.</p> <p>This is evident in Lessons 1-7 of Unit 5, Semester A, which align to LSSM 8.EE.B.5, as stated in the “Scope and Sequence.” This standard states that students are expected to graph and compare graphs of proportional relationships while understanding that the unit rate is the slope of the line. However, Lessons 1-3 include instruction that provides extensive remediation on topics covered in previous grades. For example, Lesson 1 covers reducing ratios to lowest terms, Lesson 2 covers reducing rates to unit rates, and Lesson 3 covers using unit rates to solve problems. Students should have worked with unit rates extensively in Grade 6 and 7. Therefore, lessons that are aligned to helping students remember this concept replace critical instructional time for understanding that the unit rate can also be interpreted as the slope of a graph of a proportional relationship, which is the basis of thinking needed to master functions and other algebraic reasoning. LSSM 8.G.A.1, which addresses the conceptual understanding component of rigor, is listed as aligned to lessons in Unit 4, Semester B; however, the majority of the posttest and “Daily Assignment” assessment questions focus on how figures were translated, rather than the preservation of side lengths, angle measurements, and parallel lines.</p>
	<p>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</p>	<p>Yes</p>	<p>The materials are designed so that students attain the fluencies and procedural skills required by the LSSM.</p> <p>This is evident in Unit 2, Semester A, which provides the instructional practice needed to master the rigor required in LSSM 8.EE.A.1. The materials include 6 instructional lessons to provide the practice develop the skills in LSSM 8.EE.A.1, which describes how students will work with integer exponents to generate equivalent expressions. Students are given sufficient practice time in this concept which is</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	have the foundation for later work in algebra.		needed to master more work with equations in later grades. In addition, major content standard 8.EE.C.7b, "Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms" is aligned to the procedural skill and fluency component of rigor. This concept is addressed in two lessons in Unit 5, Semester A, and six lessons in Unit 5, Semester B. These lessons scaffold instruction to lead students to mastery of fluency in solving multi step equations and provide ample practice problems for students to work in the "Daily Assignment" and post tests for each lesson, before formal assessment.
	<p>REQUIRED</p> <p>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.</p>	No	<p>The materials do not allow teachers and students to spend sufficient time working with engaging applications, nor does the curriculum provide non-routine problems that develop the mathematics of the grade/course and engage students in problem-solving.</p> <p>For example, there are few lessons dedicated to students working exclusively in the standards that require attention to application. This is evident in Unit 5, Semester A, Lesson 6, where instruction focuses on comparing relationships from a table and a graph (LSSM 8.EE.B.5). This is the one lesson that includes opportunities for students to fully attend to the application component of LSSM 8.EE.B.5, where multiple steps are necessary to identify the constant of proportionality to make comparisons. Since practice is limited in this standard, student engagement in the necessary practice to solve multi-step, real-world, problems involving proportions is also limited. In addition, LSSM 8.EE.C.8c states, "Solve real-world and mathematical problems leading to two linear equations in two variables." This component of the standard is addressed in Unit 1, Semester B, Lesson 6, where three examples are provided to build conceptual understanding of creating and solving systems, with minimal real-</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>world application tasks. The posttest contains items where students put steps of a process in order, fill in the blank with given options, and respond to one- or two-step problems. There is no multi-step, non-routine, problem found that allows students to demonstrate an understanding of the skill and concept by applying their knowledge without assistance from the curriculum. In addition, the review for the Unit 1, Semester B, Lesson 10 “Weekly Quiz,” “Systems of Linear Equations and Applications of Linear Functions,” is a word search for key vocabulary. This does not reinforce, nor does it call for application of skill.</p>
	<p>REQUIRED 3d) Balance: The three aspects of rigor are not always treated together and are not always treated separately.</p>	<p>No</p>	<p>The Grade 8 content materials do not address the three components of rigor in an adequate balance.</p> <p>For example, LSSM 8.EE.B.5, “Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways” is aligned to all components of rigor. This standard is addressed in Unit 5, Semester A, Lessons 1-7, where students revisit prior grade level content standards to convert rates to unit rates (LSSM 6.RP.A.2), identify proportional relationships from equations and graphs, and then compare proportional relationships. The “Practice Activity” and “Weekly Quiz” for Lessons 1 through 4 provide assessment items where students order the steps of a process, fill in the blank with given options, and respond to one- or two-step problems. Students can answer these questions by deductive reasoning, and are given minimal chance to utilize the mathematical skills to show mastery of the grade level content. Two of the 27 assessment items on this quiz assessed grade level content. For these questions, students identify if two given equations represent proportional or non-proportional relationships. The remaining 25 questions give students explicit instructions on what to do to solve the problems with prompts such as, “Use ratios, in lowest terms, to figure out which store is running the better deal”</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>or “Convert each rate into a unit rate.” Additionally, Unit 5, Semester A, Lesson 6 and 7 provide posttest and “Daily Assignment” questions where students complete tables, categorize tables and graphs as proportional or non-proportional, and compare unit rate values (not in context) of two proportional relationships.</p>
<p>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.</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>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.</p>	<p>No</p>	<p>The materials do not address the practice standards in such a way as to enrich the content standards of the grade.</p> <p>The instructional materials naturally encourage students to think of multiple ways to solve problems at the beginning of each instructional lesson (MP.1). For example, in Unit 6, Semester A, students are provided with an opportunity to model with mathematics by demonstrating their ability to graph linear equations or create ratio tables when given the constant of proportionality formula and the x-value using coordinate grids (MP.4).</p> <p>While some of the Mathematical Practice Standards are naturally present in the curriculum, there are not regular, intentional attempts to incorporate them all into instruction. An example of where connections could be made for teachers and students is found in Unit 1, Semester B, where students could “Look for and make use of structure” (MP.7), by giving opportunities to solve systems of equations by selecting any method. Also, in the “Weekly Quiz” for Unit 1, Semester B, Lessons 1-4, there are three assessment questions that have students choose their own method to solve a given system of equations. Instead of being prompted to solve the system using a specified method, this allows more opportunity for students to make use of the structure of the system of equations, which will enhance their ability to select an appropriate and efficient method to determine the solution(s).</p> <p>Math practices are never explicitly stated in either the teacher or student materials. In addition, the “Scope and Sequence” does not document the</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			correlation to the mathematical practice standards.
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
<p>Additional Criterion 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.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	<p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	<p>5c) Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
<p>Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	<p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	6d) Materials explicitly attend to the specialized language of mathematics.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
Additional Criterion 7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards. <input type="checkbox"/> Yes <input type="checkbox"/> 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.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	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.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	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.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	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.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	7e) Lessons are appropriately structured and scaffolded	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.

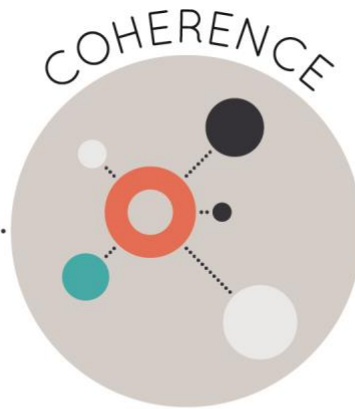
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	to support student mastery.		
	7f) Materials support the uses of technology as called for in the Standards.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
FINAL EVALUATION			
<i>Tier 1 ratings</i> receive a “Yes” in Column 1 for Criteria 1 – 7.			
<i>Tier 2 ratings</i> receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one “No” in Column 1 for the remaining criteria.			
<i>Tier 3 ratings</i> receive a “No” in Column 1 for at least one of the non-negotiable criteria.			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	No	The majority of time is not devoted to the major work of the grade/course. Only 74 (51.39%) of lessons focus on major content for Grade 8, 43 (29.86%) of the lessons focus on supporting content, and 8 (5.56%) of the 144 instructional lessons focus on additional content for Grade 8. In addition, 19 of the 144 (13.19%) instructional lessons focus on content above or below grade level, and assessment items are included that assess content beyond the scope of the LSSM for Grade 8.
	2. Consistent, Coherent Content	Yes	Materials do not connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Materials do not consistently 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.
	3. Rigor and Balance	No	Instructional materials attend to the development of procedural skills and fluency, but lack the development of conceptual understanding, application, and the balance among the three aspects.
	4. Focus and Coherence via Practice Standards	No	Materials do not promote focus and coherence by connecting practice standards with major content that is emphasized in the LSSM.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.

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

Strong mathematics instruction contains the following elements:



Focus strongly where the standards focus.



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



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

Title: Math Online Resource Bundles

Grade/Course: Algebra 1

Publisher: Spider Learning, Inc.

Copyright: 2018

Overall Rating: Tier III, Not representing quality

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

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

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

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

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

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
<p>Non-Negotiable 1. FOCUS ON MAJOR WORK⁷: Students and teachers using the materials as designed devote the large majority⁸ of time to the major work of the grade/course.</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>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.</p>	<p>No</p>	<p>The materials do not devote a majority of class time to the major work of the grade.</p> <p>As evident in the “Scope and Sequence,” there are a total of 180 lessons divided into two semesters, where 144 of those lessons are instructional and 36 are assessment related. Seventy (48.61%) of these lessons focus on major content, 20 (13.89%) focus on supporting content, and 21 (14.58%) of the 144 instructional lessons focus on additional content for Algebra I.</p> <p>Twenty-six of the 144 (18.06%) instructional lessons focus on content outside of the Louisiana Student Standards for Math (LSSM) for Algebra I. The major content standards that are not addressed are LSSM A-SSE.A.2, A-CED.A.2, A-CED.A.3, A-CED.A.4, A-REI.D.10, A-REI.D.12, F-IF.A.1, F-IF.A.2, F-IF.A.3, F-IF.B.5, F-IF.B.6, S-ID.C.7, S-ID.C.8, and S-ID.C.9. The supporting content standards that are not addressed include, LSSM N-Q.A.1, N-Q.A.2, N-Q.A.3, F-LE.A.1, and F-LE.A.3. The additional content standards that are not addressed are LSSM A-REI.C.5 and A-REI.C.6. There are 7 lessons (4.86%) in the “Scope and Sequence” for Semester A that are not aligned to any LSSM for Algebra I. Unit 2, Semester A, Lesson 14, focuses on sketches of solution intervals, which is not included in the LSSM. In Unit 5, Semester A, Lesson 3, students calculate a “Line of Best Fit,” which is aligned to LSSM A1: S-ID.B.6. Lessons 6, 7, and 8 in Unit 6, Semester A focus on generating equivalent exponential expressions, which aligns to LSSM 8.EE.A.1. Additionally, Lessons 9, 11, and 12 in Unit 6, Semester A focus on operations in scientific notation. This concept is addressed in LSSM 8.EE.A.3 and 8.EE.A.4. Lessons 13 and 14 in Unit 6, Semester A have no aligned LSSM, but relate directly to LSSM F.BF.A.1, where students “write exponential expressions to describe a</p>

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

⁸ The materials should devote at least 65% and up to approximately 85% of class time to the major work of the grade with Grades K–2 nearer the upper end of that range, i.e., 85%.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p>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.</p>	<p>No</p>	<p>relationship between two quantities, and LSSMF-LE.A.2, where students “construct linear and exponential functions... given a graph, description of a relationship, or two input-output pairs.” There are also 26 lessons found within the curriculum that are listed as aligned to prior and future standards such as, LSSM 8.G.C.7 in Grade 8, LSSM GPE.B.4 and GPE.B.7 in Geometry, and LSSM F.BF.B.4, N.RN.A.2, S-IC.A.2, and S.IC.B.3 in Algebra II.</p> <p>The instructional materials spend more than minimal time on content outside of the LSSM for Algebra. There are 26 lessons(18.06%) aligned to content standards outside of Algebra 1. Additionally, there are assessment items that make students and teachers responsible for topics that are outside of the standards for the grade. For example, this is evident in the Unit 6, Semester A, Lesson 10, “Weekly Quiz.” Question 1 states, “Match the expression in scientific notation to the value that it represents.” This question, along with others, align to LSSM 8.EE.B.4, which is outside the LSSM for Algebra 1. Additionally, assessment items in Unit 3, Semester B, Lesson 10, include rewriting expressions that involve radicals and rational exponents (LSSM A2: N.RN.A.2). For example, see question 4 which states, “Rewrite the radical expression as one with a rational exponent $^5\sqrt{81}$.” The Unit 3, Semester B exam also contains assessment questions where students are to “determine which graph of a square or cubed root function contains the points given” or identify “the graph of a square root function” (LSSM A2: F-IF.C.7b). There are three additional questions in this assessment where students must solve equations containing radical expressions and determine extraneous solutions (LSSM A2: A-REI.A.2).</p>
<p>Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course’s instructional</p>	<p>REQUIRED 2a) Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.</p>	<p>No</p>	<p>The materials do not consistently connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.</p> <p>For example, there are no lesson components that</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p>materials are coherent and consistent with the content in the Standards.</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>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.</p>	<p>No</p>	<p>focus on using the structure of an expression to determine ways to rewrite it and meet supporting standards (LSSM A-SSE.B.3), and no connections are made within the curriculum to meet major content standards (LSSM A-SSE.A.2).</p> <p>Out of 22 major content standards, 14 are not addressed. Out of 15 supporting standards, 6 are not addressed. Connections are limited throughout the curriculum.</p> <p>The materials do not consistently include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade/course, in cases where these connections are natural and important.</p> <p>For example, due to the limited focus on Algebra I standards, there are many connections that are missing. The connection missing between major LSSM A-SSE.A.2 to supporting LSSM A-SSE.B.3 is apparent since there are no lesson components that focus on using the structure of an expression to determine ways to rewrite it (LSSM A-SSE.B.3).</p> <p>In Unit 2, Semester B, Lessons 3, 4, 6, 12, and 13, the instructional materials provide connections between clusters LSSM A-REI.A, “Understand solving equations as a process of reasoning and explain the reasoning,” and LSSM A-REI.B, “Solve equations and inequalities in one variable, within the Algebra: Reasoning with Equations and Inequalities domain.” These particular lessons are sequenced so that students master the concept of solving quadratic equations and explaining their reasoning of solving the problem. Since the expectation in Algebra I is that students justify their reasoning when solving equations, the placement of these lessons in the unit is necessary for student mastery of the content.</p>
<p>Non-Negotiable 3. RIGOR AND BALANCE: Each grade’s instructional materials reflect the balances in the</p>	<p>REQUIRED 3a) Attention to Conceptual Understanding: Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific</p>	<p>No</p>	<p>The materials do not develop the conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards.</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p>Standards and help students meet the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application.</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>content standards or cluster headings by amply featuring high-quality conceptual problems and discussion questions.</p>		<p>All of the 13 major content standards that are not included in the curriculum are needed to develop conceptual understanding. Specifically, the instructional lessons for an entire cluster within a domain, LSSM F-IF.A.1, F-IF.A.2, and F-IF.A.3 are missing. These particular content standards lay the foundational understanding of the usage of function notation as it relates to the concept of a function. These missing lessons provide critical major content of the course.</p>
	<p>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.</p>	<p>No</p>	<p>The materials are not designed so that students attain the fluencies and procedural skills required by the LSSM.</p> <p>The following major standards develop procedural skill and fluency but are not addressed within the instructional materials: A-SSE.A.2, A-CED.A.2, A-CED.A.4, A-REI.D.12, F-IF.A.2, F-IF.B.6, and S-ID.C.8. Because of the lack of focus on these standards, students are not provided with sufficient practice needed to achieve procedural skill and fluency.</p>
	<p>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.</p>	<p>No</p>	<p>The materials are not designed so that teachers and students spend a sufficient amount of time working with engaging applications, especially where it is specifically called for in the standards. Three content standards that require students to engage in application are LSSM A-CED.A.1, A-CED.A.2, and S-ID.B.6. Only LSSM A-CED.A.1 is included in the Algebra 1 instructional materials. The unit lessons and assessment resources provide limited application aligned to major content (LSSM A-CED.A.1). Materials lack ample practice for content standards that call for application in the standard.</p>
	<p>REQUIRED 3d) Balance: The three aspects of rigor are not always treated together and are not always treated separately.</p>	<p>No</p>	<p>The Algebra I content materials do not address the three components of rigor in an adequate balance.</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>Major LSSM A-CED.A.1 and supporting LSSM S-ID.B.6a are aligned to all three components of rigor. However, LSSM S-ID.B.6 is not addressed in the curriculum. LSSM A-CED.A.1 is the focus of 17 lessons within Units 2, 4, and 5 of Semester A. Yet, within these 17 lessons, information and formulas are explicitly given, and there are limited opportunities for students to make connections between mathematical concepts. There is also a lack of procedural problems to help build fluency, while the application problems have students match a real-world situation with an equation, fill in the blank, and answer multiple-choice questions.</p>
<p>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.</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>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.</p>	<p>No</p>	<p>The materials do not address the practice standards in such a way as to enrich the content standards of the course.</p> <p>Many lessons throughout the curriculum present information in a conceptual form, defining key terms and vital information about the concept, followed by procedural practice and simple recall questions, but they do not allow for all of the practice standards to be implemented.</p> <p>By Algebra 1, students should be able to explain their reasoning through the use of models (MP.4); however, this skill is limited by drag and drop methods to build visual data representations, particularly in Unit 4 and Unit 5 of Semester B. The ability to use tools appropriately (MP.5) helps strengthen the focus of the course, but is not addressed adequately. Students are expected to utilize technology to graph functions. Yet, the work with graphs is limited and includes choosing the correct graph to answer a fill-in-the-blank. For example, in the Unit 5, Semester B, Lesson 3 "Daily Assignment," the students choose "the correct graph for the function: $f(x)=x-1/x+2$." However, the students are given two options to choose from. This type of questioning limits the development of higher order thinking skills toward discerning between functions.</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Math practices are never explicitly stated in either the teacher or student materials. In addition, the "Scope and Sequence" does not document the correlation to the mathematical practice standards.
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
<p>Additional Criterion 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.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	<p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	<p>5c) Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
<p>Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	<p>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</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	as a form of argument, attending thoroughly to places in the Standards that explicitly set expectations for multi-step problems.		
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	6d) Materials explicitly attend to the specialized language of mathematics.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
<p>Additional Criterion</p> <p>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.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED</p> <p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	<p>REQUIRED</p> <p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	<p>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.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	<p>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,</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	students apply what they have already learned to build mastery. Each problem or exercise has a purpose.		
	7e) Lessons are appropriately structured and scaffolded to support student mastery.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	7f) Materials support the uses of technology as called for in the Standards.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
FINAL EVALUATION <i>Tier 1 ratings</i> receive a “Yes” in Column 1 for Criteria 1 – 7. <i>Tier 2 ratings</i> receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one “No” in Column 1 for the remaining criteria. <i>Tier 3 ratings</i> receive a “No” in Column 1 for at least one of the non-negotiable criteria.			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	No	The majority of time is not devoted to the major work of the grade/course. Only 70 (48.61%) of lessons focus on major content for Algebra I, 20 (13.89%) of the lessons focus on supporting content, and 21 (14.58%) of the 144 instructional lessons focus on additional content for Algebra I. There are 26 lessons (18.06%), that focus on content outside of the standards for Algebra I. There are multiple assessment items beyond the scope of the standards for Algebra I.
	2. Consistent, Coherent Content	No	Materials do not connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Materials do not consistently 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.
	3. Rigor and Balance	No	Instructional materials do not attend to the development of procedural skills and fluency. Materials lack the development of conceptual understanding, application, and the balance among the three aspects.
	4. Focus and Coherence via Practice Standards	No	Materials do not promote focus and coherence by connecting practice standards with content that is emphasized in the LSSM.

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

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 [2018-2019 Teacher Leader Advisors](#) are selected from across the state and represent the following parishes and school systems: Ascension, Bossier, Caddo, Central, Desoto, East Baton Rouge, Einstein Charter Schools, Iberia, InspireNOLA, Jefferson, KDHSA (Jefferson Parish Charter), Lafayette, Lincoln, Livingston, Orleans, Ouachita, Pointe Coupee, Rapides, Recovery School District, RSD - Choice Foundation, RSD – FirstLine, RSD – NOCP, St. Charles, St. Mary, St. Tammany, Tangipahoa, Vermilion, West Baton Rouge, West Feliciana, Zachary. This review represents the work of current classroom teachers with experience in grades 3-12.

Appendix I.

Publisher Response

The publisher had no response.

Appendix II.

Public Comments

There were no public comments submitted.