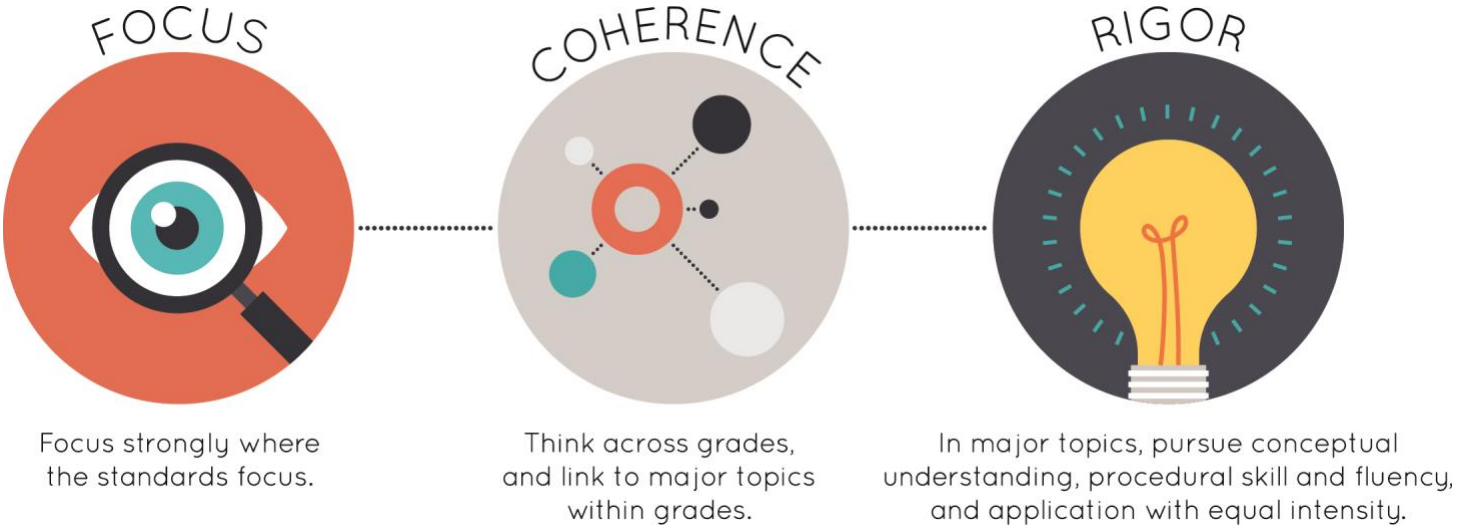
Instructional Materials Evaluation Review for Alignment in Mathematics Grades K – 12 (IMET)

FULL CURRICULUM
Instructional Materials

Strong mathematics instruction contains the following elements:



Title: **PowerTeaching Math 3rd Edition**

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

Publisher: **Success for All Foundation**

Copyright: **2015**

Overall Rating: **Tier II, Approaching quality**

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

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

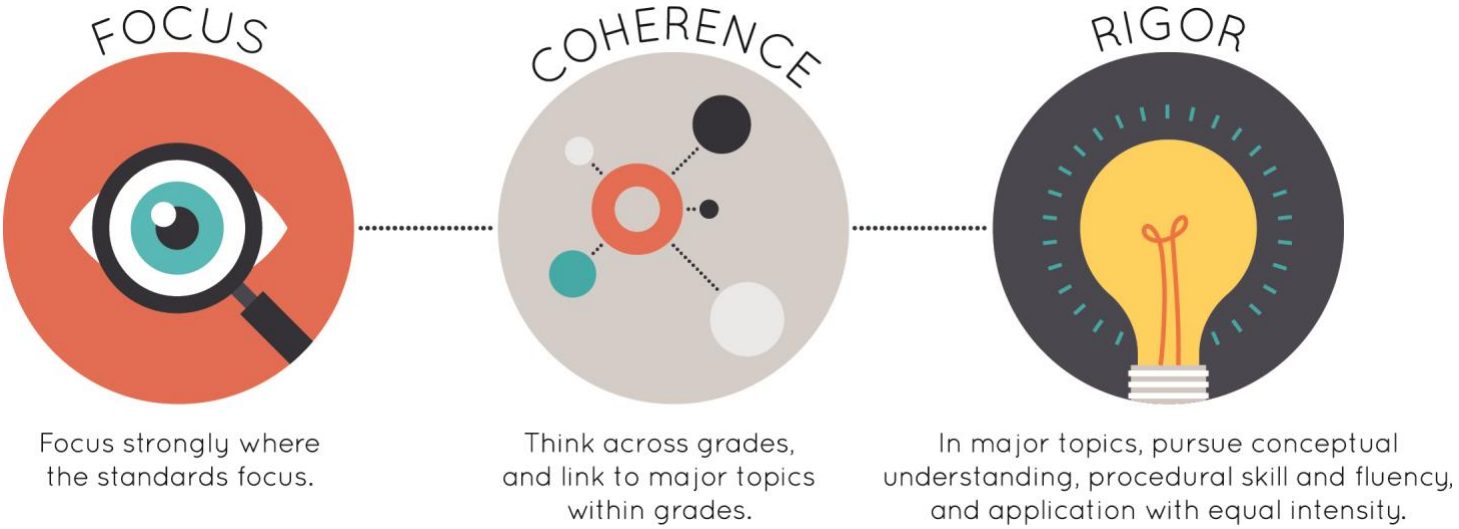
Each set of submitted materials was evaluated for alignment with the standards beginning with a review of the indicators for the non-negotiable criteria. If those criteria were met, a review of the other criteria ensued.

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

Click below for complete grade-level reviews:

Grade 6 (Tier 2) Grade 7 (Tier 2) Grade 8 (Tier 2) Algebra 1 (Tier 2)

Strong mathematics instruction contains the following elements:



Title: **PowerTeaching Math 3rd Edition** Grade/Course: **6**

Publisher: **Success for All Foundation** Copyright: **2015**

Overall Rating: **Tier II, Approaching quality**

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

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

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

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
Non-Negotiable **1. FOCUS ON MAJOR WORK[1]:** Students and teachers using the materials as designed devote the large majority[2] of time to the major work of the grade/course. ☒ Yes ☐ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.	**Yes**	The materials devote a large majority of class time to the major work of the grade. The Scope and Sequence and Curriculum Map for Louisiana, indicates that major content standards, as defined by the Louisiana State Standards for Mathematics (LSSM), are addressed in 65.35% of the sixth-grade curriculum.
	REQUIRED **1b)** In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment materials, there are no chapter tests, unit tests, or other such assessment components that make students or teachers responsible for any topics before the grade/course in which they are introduced in the Standards.	**Yes**	The instructional materials spend minimal time on content that is outside of the LSSM for sixth grade. There are no assessment items that are beyond the scope of the grade and all coursework is relevant.
Non-Negotiable **2. CONSISTENT, COHERENT CONTENT** Each course's instructional materials are coherent and consistent with the content in the Standards. ☒ Yes ☐ No	**REQUIRED** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.	**Yes**	The instructional materials reflect meaningful connections between supporting and major content to enhance focus and coherence throughout the year. For example, supporting standard LSSM 6.G.A.3 is connected to major standard LSSM 6.NS.C.8 in Unit 4, Cycle 2, Lesson 3, as students draw polygons in all quadrants of a coordinate plane and find the distance between points. In addition, Unit 12, Cycle 2, Lessons 2 and 3 connect supporting LSSM 6.G.A.1 to major LSSM 6.EE.A.2c and LSSM 6.EE.B.7, as students substitute the values of specific variables for formulas involving the area of two-dimensional figures.
	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	**Yes**	The instructional materials reflect connections between two or more domains where these connections are natural and important. For example, in Unit 13, Cycle 2, Lessons 1-4, LSSM 6.G.A.4 and LSSM 6.NS.B.3 are connected as students calculate

[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
	connections are natural and important.		the surface area of solids with rational number measurements. In addition, in Unit 8, Cycle 1, Lesson 1, LSSM 6.EE.A.3 and LSSM 6.G.A.1 are connected in Question 1, where students are to write an expression to describe the area of the rectangle, and in Question 2, where they are to write an expression to find the area of a figure that includes a triangle.
Non-Negotiable **3. RIGOR AND BALANCE:** Each grade's instructional materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application. ☒ Yes ☐ No	**REQUIRED** **3a) *Attention to Conceptual Understanding:*** Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and discussion questions.	**Yes**	The instructional materials enhance the development of the conceptual understanding of key mathematical concepts, especially where called for in the content standards. Each lesson opens with "Get the Goof" where students use prerequisite skills to identify and correct a misconception. During Teamwork Mastery, students work together on a series of problems as well as reflect on key "how" and "why" questions about the meaning of the mathematics which requires them to dig deeper to relate patterns and rules. In addition, the homework component, "For Guide on the Side," offers conceptual understanding probes for parents to pose to their children. In Unit 4, Cycle 2, Lesson 1, students are to show their understanding of the order of rational numbers on a number line (LSSM 6.NS.C.7). In Unit 7, Cycle 2, Lesson 3, students create algebraic expressions from math phrases (LSSM 6.EE.A.2a).
	REQUIRED **3b) *Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	The materials enhance the development of procedural skill and fluency of key mathematical concepts, especially where called for in the LSSM. Unit 2, Cycle 1, Lesson 4, aligns to procedural skill and fluency standard LSSM 6.NS.B.2 as students solve division problems using the standard algorithm (long division). In addition, an opportunity in each lesson, called "Mixed Practice," focuses on sixth grade standards taught in previous units. This section contains three to five questions that reinforce the LSSM that align with the procedural skill and fluency component of rigor. For example, in Unit 9, Cycle 1, Lesson 1, four questions reinforce the concept of equivalent expressions, greatest common factor (GCF), defining parts of an expression, and identifying opposite integers. This

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			curriculum also has ample independent practice necessary for the attainment of procedural skill and fluency to meet LSSM 6.NS.B.2 and LSSM 6.NS.B.3.
	REQUIRED **3c) *Attention to Applications:*** Materials are designed so that teachers and students spend sufficient time working with engaging applications, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/course, afford opportunities for practice, and engage students in problem solving. The problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit.	**Yes**	The instructional materials are designed to provide sufficient opportunity for engaging applications through real-world problems throughout the student materials and Performance Tasks. For example, in Unit 6, Cycle 2, Lesson 3, students interpret information from a table in order to calculate specific percentages associated with the cost of a fundraising dinner event using ratio reasoning (LSSM 6.RP.A.3). In addition, application standard LSSM 6.EE.B.7 is evident in Unit 9, Cycle 2, Lesson 4, as students solve real-world, one-step equations. Application standard LSSM 6.RP.A.3b is evident in Unit 5, Cycle 1, Lesson 4, as students solve unit rate problems in real-world scenarios.
	REQUIRED **3d) *Balance:*** The three aspects of rigor are not always treated together and are not always treated separately.	**Yes**	The three aspects of rigor are not always treated together or separately within the instructional materials. LSSM, with a focus on procedural skill and fluency, are addressed throughout the curriculum and through the Mixed Practice portion of the homework resources provided. LSSM aligned to the application component of rigor are addressed through real-world problems. For example, LSSM 6.NS.A.1 is aligned to all components of rigor and is addressed in multiple areas throughout the materials. Unit 3, Cycle 2, Lesson 1, builds the conceptual knowledge of the parts of a fraction in order to determine the value of the fraction. Unit 3, Cycle 3, Lessons 1-2, provide students with opportunities to fluently divide fractions. Unit 3, Cycle 3, Lesson 3, allows students to use their knowledge of the division of fractions in real-world scenarios.
Non-Negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Materials promote focus and coherence by connecting practice	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in	**Yes**	The practice standards enrich the content standards for the grade level. Section I, “Alignment to the Louisiana Student Standards for Mathematics,” emphasizes the alignment of the curriculum to the Standards for Mathematical Practice (MP). Each mathematical practice is discussed and the lesson begins with a “Get the Goof” question that notes

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
standards with content that is emphasized in the Standards. ☒ Yes ☐ No	both teacher and student materials.		the mathematical practice(s) likely used to determine the solution. In addition, the Standards of Mathematical Practice are noted for each lesson in the Scope and Sequence document. For example, Unit 2, Cycle 1, Lesson 2, allows students to use tools strategically (MP.5) by using a variety of estimation methods for calculations. Additionally, Cycle 3, Lesson 2 of the same unit, provides an opportunity for students to model with mathematics (MP.4) and reason quantitatively (MP.2) by calculating the average revenue per customer given a data table for two different food trucks. Unit 6, Cycle 1, Lesson 2 uses MP.4 as students make a model to determine the accurate ratio. Unit 8, Cycle 1, Lesson 1 uses MP.7 as students use the structure of the figure to determine the area.
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion **5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:** Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards. ☐ Yes ☒ No	**REQUIRED** **5a)** Materials provide all students extensive work with course-level problems. Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.	**No**	The materials include problems outside of the grade level that are not identified for teachers or students. For example, in Unit 3, Cycle 1, Lesson 1, the Greatest Common Factor (GCF) section, a review exercise in "Get the Goof" asks students to find all factors of the number 48, which aligns with LSSM 4.OA.B.4. There is no indication to the teacher or to the student that this problem represents below grade-level content. A teacher note in the Team Huddle portion of the lesson states, "This Team Huddle is a review of finding factor pairs." The remaining work in the lesson involves finding the greatest common factor of two numbers, which aligns to LSSM 6.NS.B.4. In Unit 5, Cycle 1, Lesson 1, a question in "Get the Goof" states, "Sam simplified 3/12. He got ⅓. What is wrong with his work?" This problem is not aligned to the grade level and has no indications for the teacher or the student. In addition, the emphasis on "simplifying" is not part of the LSSM.
	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	**Yes**	The materials relate course-level concepts to prior knowledge from earlier grades and are designed so that prior knowledge becomes reorganized and extended to accommodate the new learning. The progression of learning is seen in Unit 3, Cycle 3,

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	reorganized and extended to accommodate the new knowledge.		Lesson 2, Dividing Fractions by Fractions. During the Think Aloud portion of the lesson, the teacher models the division of fractions by fractions. The materials guide the teacher into a discussion of why "dividing by a number is the same as multiplying by the reciprocal" (page 50). The materials extend the students prior knowledge of dividing fractions in fifth grade to accommodate the new understanding that division and multiplication of fractions are related because the division of fractions can be computed by multiplying the dividend by the reciprocal of the divisor (LSSM 6.NS.A.1). In addition, the structure of each unit supports the connection between prior learning and grade level content. Unit 9 Overview states, "students will use what they know about writing and evaluating expressions, number sense, and the properties of operations to explore and solve equations." Lesson 1 begins by having students analyze student work that is related to creating equivalent expressions, which is followed by whole class instruction on the development of the concept of an equation.
	5c) Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.	**No**	The materials include learning objectives that are not clearly aligned to the LSSM for the grade level. For example, in Unit 3, Cycle 2, the objectives are to, "Estimate the value of complex fractions in relation to 0, ½, and 1," "Multiply fractions with meaning," and "Multiply fractions with mixed numbers." While there is a connection to LSSM 6.NS.A.1, the objectives are not clearly aligned to the standard where students must "Interpret and compute quotients of fractions, and solve word problems involving the division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem." In Unit 7, Cycle 1, the objectives are to "Use real-world examples, such as arrays, to simplify exponents," and to "Use the full order of operations to simplify and evaluate numeric expressions." These objectives and lessons, which emphasize simplifying, are not part of LSSM 6.EE.A.1 requirements to "Write and evaluate numerical expressions involving whole-number exponents."

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Additional Criterion **6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:** Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards. ☒ Yes ☐ No	**REQUIRED** **6a)** Materials attend to the full meaning of each practice standard. Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard. Alignments to practice standards are accurate.	**Yes**	The instructional materials attend to the full meaning of each math practice standard. Reference to the applicable math practices within each lesson can be found in the teacher edition. Each lesson provides opportunities for students to complete meaningful work with the math practice standards, or "Thinking Like A Mathematician." For example, in Unit 3, Cycle 3, Lesson 3, students solve word problems using fractions. The materials prompt teachers to show the "Think Like a Mathematician video clip for practice #1: Make Sense of it." Students engage with MP.1 throughout the lessons as they make sense of the word problems and solve them using multiplication and division of fractions. Additionally, in Unit 9, Cycle 1, Lesson 1, students reason abstractly and quantitatively (MP.2) while analyzing an unbalanced scale to determine how to balance the scale using mathematical equations. In Lesson 2, students critique the reasoning of another student (MP.3) by describing a student's error in balancing an equation.
	REQUIRED **6b)** Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics that is detailed in the content standards (cf. MP.3). Materials engage students in problem solving as a form of argument, attending thoroughly to places in the Standards that explicitly set expectations for multi-step problems.	**Yes**	The materials provide sufficient opportunities for students to construct viable arguments and critique the reasoning of others through "Get the Goof" problems that are provided at the opening of each lesson. Students analyze the work of others, determine errors, and explain their reasoning based on mathematical evidence. For example, in Unit 3, Cycle 3, Lesson 1, during the Lightning Round, students must "Tell whether the answer will be greater than or less than the dividend. Then divide. 4) A chef slices a 14-inch Italian sausage into equal 7/12 -inch pieces. How many pieces of sausage did the chef get? Explain your thinking." Students work collaboratively in groups, not only to determine the answer but also to determine which math practice standard was used to find the answer. During the lesson, teachers pose the following discussion questions to teams, "How can you estimate the quotient?" "Will the quotient be greater than 1 or less than 1? How do you know?" On page 33 of the Comprehensive guide it is explained that "Through a

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			dynamic process of teacher modeling, reinforcement, and assessment, students become actively engaged in working through problems and explaining their thinking with partners and teams."
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	**Yes**	In the Scope and Sequence, the Mathematical Practices are listed as aligned to each individual lesson. There are also additional materials outlining the practice standards in the Power Teaching Math Guide provided. Each Unit Overview section also provides teachers the "Think Like a Mathematician" practices used within the materials. These directly mimic the standards for mathematical practice and are embedded in lesson instruction. The Comprehensive Resource Guide for Teachers and Leaders provides an explanation that "mastery of the mathematical practice standards are integral to the student's ability to become mathematically proficient" (page 46). Also included in the curriculum materials are videos with course-level problems that further display how each math practice is used in the course.
	6d) Materials explicitly attend to the specialized language of mathematics.	**Yes**	The instructional materials focus on the development of appropriate grade-level mathematical language. Each lesson provides a focus on new vocabulary terms and their application within the lesson. In addition, in the Guide to Resources, students are awarded team celebration points for a variety of reasons, including "finding math vocabulary in home reading and defining it correctly" in the Vocabulary Vault using a Vocabulary Voucher. For example, in Unit 4, Cycle 1, Lesson 1, students are made aware that "An integer is any positive whole number, negative whole number, or zero," and that opposite integers are the same distance from zero on a number line. Students use precise math language regularly when providing solutions to problems along with their rationale in the classroom routine as a "Random Reporter" where they are encouraged to explain the team's method for solving math problems.
Additional Criterion **7. INDICATORS OF QUALITY:**	**REQUIRED** **7a)** There is variety in what students produce. For	**Yes**	Students produce a variety of responses. For example, in Unit 6, Cycle 1, Lessons 2 and 3, Intro to

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards. ☒ Yes ☐ No	example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.		Ratios and Rates, the homework instructions are for students to use ratio reasoning to complete tables and respond to questions that require interpretation within the context of the problem. Students are also given the opportunity to write a rate in words and determine the unit rate given a relationship that can be represented with a rate. In addition, an embedded collaborative structure fosters ongoing discussion of math problems within student groups. For example, in Unit 9, Cycle 2, Lesson 2, students are encouraged to first answer problems independently, then to answer them in groups. An example of the type of independent practice problem six, which is to "Solve the equation. Show your work. d-65 = 42 Explain your thinking." Students are encouraged to use scale models to demonstrate how to balance the equations. Students must also provide a detailed verbal explanation of how the solution for the problem was derived.
	REQUIRED **7b)** There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of student responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Yes**	The instructional materials provide separate resources that support and reward teacher study. The Guide document, which is a comprehensive resource for teachers and leaders, and the Teacher Unit Guide both provide in-depth supplementary information to help math teachers implement the program in their classrooms. The Teacher Unit Guide includes guidance on how to explicitly instruct each lesson, scripted questions to help guide students to mastery on the math concepts, explanations on how the mathematical practices are used in the unit, and descriptions on how the math units are comprised. The Comprehensive resource guide provides guidance on how to structure math classrooms so that collaborative learning is maximized.
	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.	**No**	Although the materials provide instruction on math vocabulary for all students, they do not provide specific support for English Language Learners and other special populations. While measures are in place to track individual mastery throughout the instructional materials, there is no evidence of support specific to diverse learners.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	7d) The underlying design of the materials distinguishes between problems and exercises. In essence, the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.	**Yes**	The underlying design of the materials distinguishes between problems and exercises. All new learning occurs as teacher-led direct instruction called guided practice. During guided practice, students solve problems. Lessons begin with a review problem called "Get the Goof" and provide an opportunity for students to work through a problem in layers, such as in the Think Aloud problem in Unit 8, Cycle 2, Lesson 3. The students walk through modeling a real-world scenario using the distributive property. Additional exercises are found at the end of each lesson in the Homework and Quick Check sections, where students apply their understanding of learned mathematical concepts.
	7e) Lessons are appropriately structured and scaffolded to support student mastery.	**Yes**	Lessons are structured and scaffolded to support student mastery, and intentionally model The Cycle of Effective Instruction. For example, in Unit 12, Cycle 1, Lesson 1, Converting Measurements, during the guided instruction, students are provided several real-life examples of how measurement conversions are used daily. One Guided practice question states, "A standard football field is 120 yards long. If you measured that length in inches, will your answer be greater than or less than 120? Why do you think so?" Another problem states, "A bathtub holds about 800 cups of water. If you measure the water in gallons, will the number of gallons will be more or less than 800? Why do you think so?" Later in the lesson, the newly acquired knowledge is formalized by providing examples of conversion factors as a method to change from one unit to another. During the Lightning Round students must, "Convert to the given unit. Show your work" and are told, "The largest elephant ever recorded weighed about 12,000 kilograms. What is the elephant's weight in grams? Explain your thinking." The solution includes a conversion factor to help change the unit from kilograms to grams by showing 12, 000 x 10hg/1kg x 10 dkg/1 hg x 10 g / 1 dkg = 12,000,000g. Each lesson provides supplemental support with explanations for student learning in "The Guide on the Side." This document

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			provides those assisting students outside of class with questions to ask that are relative to the content, as well as, supplemental resources to solidify understanding.
	7f) Materials support the uses of technology as called for in the Standards.	**N/A**	There are no requirements for technology in the LSSM for this grade.

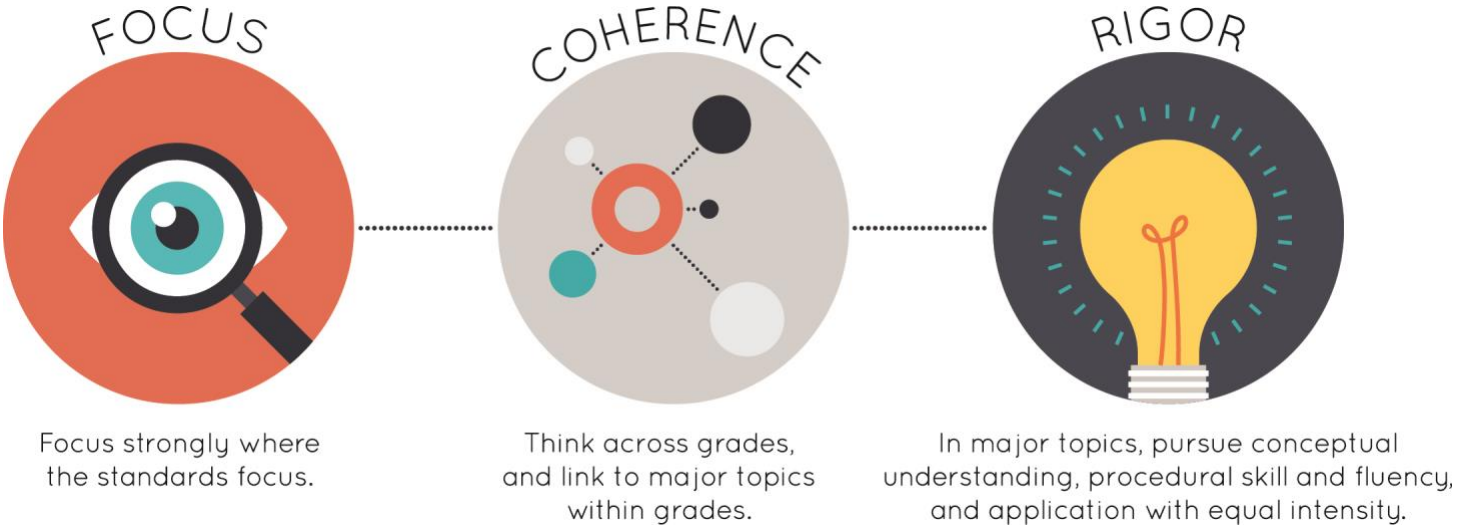
FINAL EVALUATION
Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the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

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

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	**Yes**	The materials devote a majority of class time to the major work of the grade (65.35%) and spend minimal time on content outside the requirements of the LSSM for the grade level.
	2. Consistent, Coherent Content	**Yes**	The instructional materials are consistent and coherent with the LSSM.
	3. Rigor and Balance	**Yes**	The three aspects of rigor are not always treated together or separately within the curriculum.
	4. Focus and Coherence via Practice Standards	**Yes**	The materials use the math practice standards to strengthen and enrich the focus of the content standards for the grade.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**No**	The materials include problems outside of the grade level that are not identified for teachers or students. Learning objectives are not clearly aligned with the LSSM for the grade level.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	The materials attend to the full meaning of each practice standard. There are teacher-directed materials that explain the role of the practice standards and explicitly attend to the specialized language of mathematics.
	7. Indicators of Quality	**Yes**	Students produce a variety of responses and utilize technology where appropriate. Lessons are scaffolded and identify the difference between problems and exercises. However, there is no support for special populations of students.

FINAL DECISION FOR THIS MATERIAL: **Tier II, Approaching quality**

Strong mathematics instruction contains the following elements:



Title: **PowerTeaching Math 3rd Edition** Grade/Course: **7**

Publisher: **Success for All Foundation** Copyright: **2015**

Overall Rating: **Tier II, Approaching quality**

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

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

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

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
Non-Negotiable **1. FOCUS ON MAJOR WORK[3]:** Students and teachers using the materials as designed devote the large majority[4] of time to the major work of the grade/course. ☒ Yes ☐ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.	**Yes**	The materials devote a large majority of class time to the major work of the grade. The Scope and Sequence and Curriculum Map for Louisiana indicates that major content standards, as defined by the Louisiana State Standards for Mathematics (LSSM), are addressed in 65.09% of the seventh-grade curriculum.
	REQUIRED **1b)** In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment materials, there are no chapter tests, unit tests, or other such assessment components that make students or teachers responsible for any topics before the grade/course in which they are introduced in the Standards.	**Yes**	The instructional materials spend minimal time on content that is outside of the LSSM for seventh grade. Content lessons that extend and scaffold instruction are listed as optional. Assessment items pertain to the mathematical language, appropriate number system, and content standards for the grade level. For example, see Unit 2, Unit Check, where students write and solve numerical expressions involving rational numbers in real-world situations (LSSM 7.NS.A.1-3). In Unit 5, Cycle 2, Performance Task, students make sense of real-world problems and solve multi-step mathematical problems using rational numbers in any form (LSSM 7.EE.B.3). Students must work through a series of tasks involving percent to plan a budget for a sports team given various data points.
Non-Negotiable **2. CONSISTENT, COHERENT CONTENT** Each course's instructional materials are coherent and consistent with the content in the Standards. ☒ Yes ☐ No	**REQUIRED** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.	**Yes**	The instructional materials reflect meaningful connections between supporting and major content to enhance focus and coherence throughout the year. For example, in Unit 11, Cycles 1 and 2, the curriculum "connects probability to students prior understanding of ratios by reminding them that when thinking about the probability of a single event happening out of all possible events, or the part out of the whole." The Louisiana Addendum makes adjustments to teacher questioning, directing the focus on the connection between supporting LSSM 7.SP.C.6 and major LSSM 7.RP.A.2. In addition, both Unit 12 focus on Random Sampling and the Louisiana Addendum demonstrate a connection between supporting LSSM 7.SP.A.1 and 7.RP.A.2 through teacher questioning and discussion.

[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
	REQUIRED **2b)** Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade/course, in cases where these connections are natural and important.	**Yes**	The instructional materials reflect connections between two or more domains where these connections are natural and important. For example, in Unit 8, Cycle 2, Lesson 2, LSSM 7.G.A.3 is connected with LSSM 7.G.B.6, as students find the area of cross-sections of polyhedra. In addition, in Unit 9, LSSM 7.EE.B.4 is connected with LSSM 7.G.B.5, as students write and solve equations for missing angle measures.
Non-Negotiable **3. RIGOR AND BALANCE:** Each grade's instructional materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application. ☒ Yes ☐ No	**REQUIRED** **3a)** ***Attention to Conceptual Understanding:*** Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and discussion questions.	**Yes**	The instructional materials enhance the development of the conceptual understanding of key mathematical concepts, especially where called for in the content standards. Each lesson opens with "Get the Goof" where students must use prerequisite skills to identify and correct a misconception. During Teamwork Mastery, students work together on a series of problems as well as reflect on key "how" and "why" questions about the meaning of the mathematics which requires them to dig deeper to relate patterns and rules. In addition, the homework component, "For Guide on the Side," offers conceptual understanding probes for parents to pose to their children.
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	The materials enhance the development of procedural skill and fluency of key mathematical concepts, especially where called for in the LSSM. Unit 1, Cycle 1, Lesson 4, aligns to LSSM 7.NS.A.1d, providing students with ample opportunities to add and subtract rational numbers. In Unit 3, Cycle 2, Lesson 3, students fluently convert fractions to decimals using long division (LSSM 7.NS.A.2d). Unit 4, Cycle 1, Lessons 1, 2, and 3, provide ample problems to promote fluency of calculating unit rates (LSSM 7.RP.A.1) through the Teamwork, Homework, Quick Check, and eight problems on the Cycle Check. In addition, an opportunity in each lesson, called "Mixed Practice," focuses on seventh grade standards taught in previous units. This section contains three to five questions that reinforce the LSSM that align with the procedural skill and fluency component of rigor.
	REQUIRED	**Yes**	The instructional materials are designed to provide

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	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.		sufficient opportunity for engaging applications through real-world problems throughout the student materials and Performance Tasks. For example, Unit 3, Cycle 3, Lessons 1-3, emphasize LSSM 7.NS.A.1, 7.NS.A.2, and 7.NS.A.3. Students perform operations using rational numbers as related to deep-sea diving. In addition, Unit 8 provides a task where students are given a budget, design fee, and other pertinent information in order to design a bathroom, using scale drawings and the area of polygons (LSSM 7.G.B.6).
	REQUIRED **3d) *Balance:*** The three aspects of rigor are not always treated together and are not always treated separately.	**Yes**	The three aspects of rigor are not always treated together or separately within the instructional materials. LSSM, with a focus on procedural skill and fluency, are addressed throughout the curriculum and through the Mixed Practice portion of the homework resources provided. LSSM aligned to the application component of rigor are addressed through real-world problems. For example, LSSM 7.EE.B.4b is aligned to all components of rigor and is addressed in multiple areas throughout the materials. Unit 7, Cycle 2, Lessons 1-2, build conceptual understanding of an inequality and the proper way to graph a solution, as well as provide multiple opportunities for students to solve linear inequalities for one variable. Additionally, in Unit 7, Cycle 2, Lesson 4, students create and solve inequalities that apply to real-world scenarios.
Non-Negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards. ☒ Yes ☐ No	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in both teacher and student materials.	**Yes**	The practice standards enrich the content standards for the grade level. Section I, "Alignment to the Louisiana Student Standards for Mathematics," emphasizes the alignment of the curriculum to the Standards for Mathematical Practice (MP). Each mathematical practice is discussed and the lesson begins with a "Get the Goof" question that notes the mathematical practice(s) likely used to determine the solution. In addition, the Standards of Mathematical Practice are noted for each lesson in the Scope and Sequence document. For example, Unit 6, Cycle 1, Lesson 3, shows the use of MP.6 as

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			students must be precise when evaluating a mathematical expression given that x = 4. Additionally, in Unit 11, Cycle 2, Lesson 3, students must make sense (MP.1) of experimental probability as needed in the problem given.
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion **5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:** Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards. ☐ Yes ☒ No	**REQUIRED** **5a)** Materials provide all students extensive work with course-level problems. Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.	**No**	The materials include problems outside of the grade level that are not identified for teachers or students. For example, in Unit 2, Cycle 1, Lesson 1, students are to answer a question during "Get the Goof" that asks, "Sand classified ½ as an integer. What's wrong with his thinking?" There is no indication to the teacher or to the student that this problem is not aligned to seventh grade standards. In Unit 4, Cycle 1, Lesson 1, the "Get the Goof" problem states, "When Audrey solved 5.672 ÷ 1.3, she got the quotient 0.4363. What's wrong with her thinking?" This problem is below grade-level and has no indication of that for the teacher or student. The teacher note suggests reminding students that "the divisor must be a whole number." However, this is not mathematically correct. In Unit 11, Cycle 1, Lesson 2, the "Get The Goof" problem that students must solve states, "there are 32 red marbles and 57 blue marbles in a bag. Jeremiah said the probability of selecting a red marble is 32/57. What's wrong with his thinking?" The teacher guide explains that the purpose of including this problem is to relate the concept of probability to ratios, but does not go on to also indicate that it is below grade level. The concept of relating the number of favorable outcomes to the total number of possible outcomes is directly related to LSSM 6.RP.A.3c, finding the part when given a whole.
	REQUIRED **5b)** Materials relate course-level concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.	**Yes**	The materials relate course-level concepts to prior knowledge from earlier grades and are designed so that prior knowledge becomes reorganized and extended to accommodate the new learning. For example, Unit 4, Cycle 1, Lesson 1, Basic Unit Rates, facilitates instruction so that the prior knowledge of calculating and understanding unit rates (LSSM 6.RP.A.2), as well as the application of ratios to solve

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			real-world problems (LSSM 6.RP.A.3) can be applied to determine the unit rate given fractions in Lesson 2 (LSSM 7.RP.A.1). However, the lesson itself does not indicate to the teacher or to the student that the mathematics is aligned to sixth-grade content. This is also seen in Unit 11, Cycle 1, Lesson 1, Understanding Probability. This lesson is designed so that the prior knowledge of ratios is reorganized to accommodate the new knowledge of probability. In the Interactive Instruction and Guided Practice portions of the lesson, there is a Think Aloud script that encourages teachers to explain to students how using ratios can help them understand probability. The script states, "Today we're going to work on understanding what these mean and on writing probabilities as fractions. We learned about fractions and ratios in earlier units. Using our knowledge of ratios will help us think about probability. When we use the knowledge we already learned and apply it to new subjects, we're using TLM practice #3!" Since probability involves describing the likelihood of events occurring in a situation, the idea of describing part-to-part and part-to-whole relationships can become a direct extension of this type of thinking.
	5c) Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.	**No**	The materials include learning objectives that are not clearly aligned to the LSSM for the grade level. For example, the objective for Unit 2, Cycle 1, Lesson 3 is to "Use manipulatives and pictures to add integers." The lesson claims to align with LSSM 7.NS.A.1c requirements to "Understand subtraction of rational numbers as adding the additive inverse, p - q = p + (-q). Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts." The lesson objective for Unit 9, Cycle 1, Lesson 1, to "Learn vocabulary associated with circle, and figure out the relationship between the circumference and diameter of all circles," is not visibly shaped by LSSM 7.G.B.4 to "Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			derivation of the relationship between the circumference and the area of a circle." The objective for Unit 9, Cycle 2, Lesson 1 to "Identify types of angles by size and relation to other angles, and construct angles" is not visibly shaped by LSSM 7.G.A.2 which requires students to "Draw … geometric shapes with given conditions. (Focus is on triangles from three measures of angles or sides, noticing when the conditions determine one and only one triangle, more than one triangle, or no triangle.)"
Additional Criterion **6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:** Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards. ☒ Yes ☐ No	**REQUIRED** **6a)** Materials attend to the full meaning of each practice standard. Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard. Alignments to practice standards are accurate.	**Yes**	The instructional materials attend to the full meaning of each math practice standard. Each lesson provides opportunities for the students to complete meaningful work with the math practice standards, or "Thinking Like A Mathematician." For example, in Unit 1, Cycle 1, Lessons 3-5, meaningful practice is provided to guide students in the use of MP.1, as they make sense of word problems. In Unit 9, Cycle 1, Lesson 1, students are asked, "Kenyatta draws a circle for an art project. She uses string to measure the diameter and circumference of her circle: diameter = 4.7 in. and circumference = 15 in. Do you think Kenyatta measured the circle correctly? Explain your thinking." The question not only requires an answer but also an explanation of how the answer was derived. In the response, MP.5 was used to solve the problem because estimation was used as a tool to mentally compute that the circumference of a circle is a little more than 3 times its diameter ($C=d \cdot \pi$). In Unit 3, Cycle 2, Lesson 5, students use MP.4 by creating and using a number line to respond to a problem which states, "Four friends played a board game in which you can win and lose points. Judy had 14 points more than Petey. Dani had 8 points in total. Petey had 15 fewer points than Dani. Walt had 7 points more than Judy. How many points did each player have?"
	REQUIRED **6b)** Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level	**Yes**	The materials provide sufficient opportunities for students to construct viable arguments and critique the reasoning of others through "Get the Goof" problems that are provided at the opening of each

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	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.		lesson. Students analyze the work of others, determine errors, and explain their reasoning based on mathematical evidence. For example, in Unit 7, Cycle 1, Lesson 3, students are to "construct viable arguments, when explaining what is wrong with Valeris' work on the problem "6b - 2 - 9b = 6 - 4b." In Unit 12, Cycle 2, Lesson 3, teams work to critique the reasoning of Mike who said, "to see if the vitamin bottles have correct safety packaging, the quality control department of Everyday Vitamins should check the first 10 bottles that are produced in the morning." On page 33 of the Comprehensive guide it is explained that "Through a dynamic process of teacher modeling, reinforcement, and assessment, students become actively engaged in working through problems and explaining their thinking with partners and teams."
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	**Yes**	In the Scope and Sequence, the Mathematical Practices are listed as aligned to each individual lesson. There are also additional materials outlining the practice standards in the Power Teaching Math Guide provided. Each Unit Overview section also provides teachers the "Think Like a Mathematician" practices used within the materials. These directly mimic the standards for mathematical practice and are embedded in lesson instruction. The Comprehensive Resource Guide for Teachers and Leaders provides an explanation that "mastery of the mathematical practice standards are integral to the student's ability to become mathematically proficient" (page 46). Also included in the curriculum materials are videos with course-level problems that further display how each math practice is used in the course.
	6d) Materials explicitly attend to the specialized language of mathematics.	**Yes**	The instructional materials focus on the development of appropriate grade-level mathematical language. Each lesson provides a focus on new vocabulary terms and their application within the lesson. In the Guide to Resources, students are awarded team celebration points for a variety of reasons, including "finding math vocabulary in home reading and defining it

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			correctly" in the Vocabulary Vault using a Vocabulary Voucher. Students use precise math language regularly when providing solutions to problems along with their rationale in the classroom routine as a "Random Reporter" where they are encouraged to explain the team's method for solving math problems. For example, in Unit 13, Cycle 1, Lesson 3, students analyze a box plot using a variety of vocabulary terms such as "median," "data," and "interquartile range."
Additional Criterion **7. INDICATORS OF QUALITY:** Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards. ☒ Yes ☐ No	**REQUIRED** **7a)** There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.	**Yes**	Students produce a variety of responses. Students are given the opportunity to explain their reasoning through multiple activities using the learning strategy, Think-Pair-Share, and in homework and guided practice exercises. For example, in Unit 2, Cycle 1, Lesson 3, Adding and Subtracting Rational Numbers, students draw number lines and use algebra tiles to model the addition of integers during the team mastery portion of the lesson. In the homework assignment for Unit 5, Cycle 1, Lesson 3, students are directed to "explain your thinking" in Questions 1 and 5. Students are also asked to provide answers in the form of a percent. In Unit 3, Cycle 3, Performance Task, students first show competency in reading a recreational dive table, then identify intervals of time, critique other students' thinking, and determine costs based on the price of gear and allotted amounts of money.
	REQUIRED **7b)** There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of student responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Yes**	The instructional materials provide separate resources that support and reward teacher study. The Guide document, which is a comprehensive resource for teachers and leaders, and the Teacher Unit Guide both provide in-depth supplementary information to help math teachers implement the program in their classrooms. The Teacher Unit Guide includes guidance on how to explicitly instruct each lesson, scripted questions to help guide students to mastery on the math concepts, explanations on how the mathematical practices are used in the unit, and descriptions on how the math units are comprised. The Comprehensive resource guide provides guidance on how to structure math classrooms so

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			that collaborative learning is maximized.
	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.	**No**	Although the materials provide instruction on math vocabulary for all students, they do not provide specific support for English Language Learners and other special populations. While measures are in place to track individual mastery throughout the instructional materials, there is no evidence of support specific to diverse learners.
	7d) The underlying design of the materials distinguishes between problems and exercises. In essence, the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.	**Yes**	The underlying design of the materials distinguishes between problems and exercises. All new learning occurs as teacher-led direct instruction called guided practice. During guided practice, students solve problems. Lessons begin with a review problem called "Get the Goof" and provide an opportunity for students to work through a problem in layers, such as the Think Aloud problem in Unit 7, Cycle 1, Lesson 1, Solving Two-Step Equations, where the class works together to solve a two-step equation for the first time. The materials provide additional practice during the Team Mastery portion of the lesson. Exercises are also found at the end of each lesson in the Homework and Quick Check sections, where students apply their understanding of learned mathematical concepts. A Quick Check exercise from this lesson states, "Solve for the variable in the equation 220 + 5.6b = 650.08."
	7e) Lessons are appropriately structured and scaffolded to support student mastery.	**Yes**	Lessons are structured and scaffolded to support student mastery, and intentionally model The Cycle of Effective Instruction. For example, in Unit 4, Cycle 2, Lesson 1, during Interactive Instruction and Guided Practice, students first work in their Team Huddle to identify what they might know about proportional relationships. The problem states, "Isa painted a figure with a square inside it. She wanted to paint a new version that was proportional to the original, but larger. Which could be the larger version that Isa painted: A or B? How do you know? What does proportional mean?" The problem also includes three pictures. Students then complete a Think Aloud to model using tables and graphs to determine whether a relationship is proportional. The teacher walks through the problem which

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			states, "Andie bought 5 notebooks for $6.50, and Quincy bought 3 notebooks for $3.90. Did they pay proportional amounts for the notebook?" The teacher is to also mention previously learned mathematics (i.e., rates and unit rates). After the direct instruction, students use Think-Pair-Share and are asked, "Do you think the rate at which you solve different math problems is proportional?" The lesson continues with a video and additional problems for the teams to complete. Each lesson provides supplemental support with explanations for student learning in "The Guide on the Side." This document provides those assisting students outside of class with questions to ask that are relative to the content, as well as, supplemental resources to solidify understanding.
	7f) Materials support the uses of technology as called for in the Standards.	**Yes**	The materials support the use of technology. LSSM 7.G.A.2 requires students to "Draw (freehand, with a ruler and protractor, or with technology) geometric shapes with given conditions." The Scope and Sequence for Unit 8, Cycle 3, lists possible tools for the given performance task as "online geometry construction tools (e.g. www.desmos.com, Google Sketch-Up)." This gives teachers an opportunity to utilize these digital resources at their own discretion.

FINAL EVALUATION

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

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

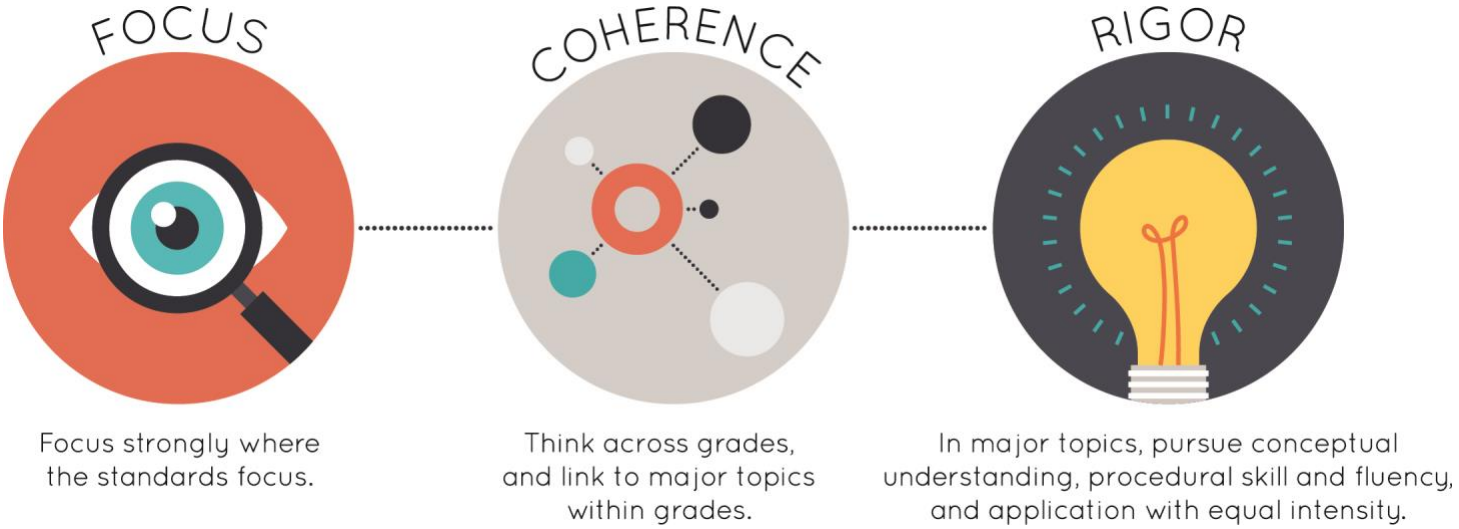
Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

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

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	**Yes**	The materials devote a majority of class time to the major work of the grade (65.09%) and spend minimal time on content outside the requirements of the LSSM for the grade level.
	2. Consistent, Coherent Content	**Yes**	The instructional materials are consistent and coherent with the LSSM.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	3. Rigor and Balance	**Yes**	The three aspects of rigor are not always treated together or separately within the curriculum.
	4. Focus and Coherence via Practice Standards	**Yes**	The materials use the math practice standards to strengthen and enrich the focus of the content standards for the grade.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**No**	The materials include problems outside of the grade level that are not identified for teachers or students. Learning objectives are not clearly aligned with the LSSM for the grade level.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	The materials attend to the full meaning of each practice standard. There are teacher-directed materials that explain the role of the practice standards and explicitly attend to the specialized language of mathematics.
	7. Indicators of Quality	**Yes**	Students produce a variety of responses and utilize technology where appropriate. Lessons are scaffolded and identify the difference between problems and exercises. However, there is no support for special populations of students.
FINAL DECISION FOR THIS MATERIAL: **Tier II, Approaching quality**			

Strong mathematics instruction contains the following elements:



Title: **PowerTeaching Math 3rd Edition** Grade/Course: **8**

Publisher: **Success for All Foundation** Copyright: **2015**

Overall Rating: **Tier II, Approaching quality**

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

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

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

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
Non-Negotiable **1. FOCUS ON MAJOR WORK[5]:** Students and teachers using the materials as designed devote the large majority[6] of time to the major work of the grade/course. ☒ Yes ☐ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.	**Yes**	The materials devote a large majority of class time to the major work of the grade. The Scope and Sequence and Curriculum Map for Louisiana indicates that major content standards, as defined by the Louisiana State Standards for Mathematics (LSSM), are addressed in 69.31% of the eighth-grade curriculum.
	REQUIRED **1b)** In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment materials, there are no chapter tests, unit tests, or other such assessment components that make students or teachers responsible for any topics before the grade/course in which they are introduced in the Standards.	**Yes**	The instructional materials spend minimal time on content that is outside of the LSSM for eighth grade. Lesson components and assessment items that are outside of the LSSM are explained in the Math Addendum for Louisiana. For example, Unit 5, Cycle 1, Lesson 2, in the Team Mastery problems 1, 4, 5, 8, 10, 12, the challenge problem, multiple homework problems, and Quick Check assessment item for this lesson, students reflect figures across lines other than the y and x-axis. LSSM 8.G.A.2, 8.G.A.3, and 8.G.A.4, state that "... reflections are only over the y-axis and x-axis in Grade 8." The addendum instructs teachers to alter the problems to reflect over the x and y-axis and to adjust the answers accordingly.
Non-Negotiable **2. CONSISTENT, COHERENT CONTENT** Each course's instructional materials are coherent and consistent with the content in the Standards. ☒ Yes ☐ No	**REQUIRED** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.	**Yes**	The instructional materials reflect meaningful connections between supporting and major content to enhance focus and coherence throughout the year. For example, supporting standards LSSM 8.F.B.4 8.F.B.5 are connected with major standards LSSM 8.F.A.1, 8.F.A.2, and 8.F.A.3 in Unit 10, Cycle 3, Lessons 1-3, Performance Task where students compare the cost of renting versus buying a home. LSSM 8.G.C.9 supports LSSM 8.G.B.7 in Unit 4, Cycle 2, Lessons 3-4, where students apply the Pythagorean theorem to find the slant height of pyramids and diagonals of prisms.
	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	**Yes**	The instructional materials include problems and activities that serve to connect two or more clusters in a domain or two or more domains where these connections are natural and important. For example, LSSM 8.NS.A.1 supports LSSM 8.EE.A.1 in Unit 3,

[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
	connections are natural and important.		Cycle 1, Lessons 2 and 4, as students connect classifying rational and irrational numbers (LSSM 8.NS.A.1) with finding equivalent expressions and square roots.
Non-Negotiable **3. RIGOR AND BALANCE:** Each grade's instructional materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application. ☒ Yes ☐ No	**REQUIRED** **3a) *Attention to Conceptual Understanding:*** Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and discussion questions.	**Yes**	The instructional materials enhance the development of the conceptual understanding of key mathematical concepts, especially where called for in the content standards. Each lesson opens with "Get the Goof" where students must use prerequisite skills to identify and correct a misconception. During Teamwork Mastery, students work together on a series of problems as well as reflect on key "how" and "why" questions about the meaning of the mathematics which requires them to dig deeper to relate patterns and rules. In addition, the homework component, "For Guide on the Side," offers conceptual understanding probes for parents to pose to their children. Unit 2, Cycle 1, Lesson 1, provides opportunities for students to classify various square roots as rational or irrational using the definition of rational and irrational numbers (LSSM 8.NS.A.1). In Unit 9, Cycle 1, Lesson 1, students demonstrate their conceptual understanding of functions in order to accurately determine if various data forms are indeed functions (LSSM 8.F.A.1).
	REQUIRED **3b) *Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	The materials enhance the development of procedural skill and fluency of key mathematical concepts, especially where called for in the LSSM. In addition, an opportunity in each lesson, called "Mixed Practice," focuses on eighth grade standards taught in previous units. This section contains three to five questions to reinforce the LSSM that align with the procedural skill and fluency component of rigor. For example, Unit 4, Cycle 2, Lesson 2, provides practice to build fluency in determining the distance between two given coordinate pairs (LSSM 8.G.B.8) through the Teamwork, Quick Check, and Homework components of the lesson. Unit 8, Cycle 1, Lesson 3, aligns to LSSM 8.EE.C.7b as students use the distributive property to solve one-variable linear equations.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	REQUIRED **3c) *Attention to Applications:*** Materials are designed so that teachers and students spend sufficient time working with engaging applications, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/course, afford opportunities for practice, and engage students in problem solving. The problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit.	**Yes**	The instructional materials are designed to provide sufficient opportunity for engaging applications through real-world problems throughout the student materials and Performance Tasks. In the active instruction section of Unit 7, Cycle 2, Lesson 4, students graph two proportional relationships and analyze the slope as the price of fish per pound (LSSM 8.EE.B.5). In Unit 9, Cycle 1, Lesson 3, students compare the height of a plant over time as illustrated by a table and a graph (LSSM 8.F.A.2). Unit 10, Cycle 3, provides students the opportunity to apply their skills that align to LSSM clusters 8.F.A and 8.F.B to compare and contrast renting and buying a home through the creation of linear functions in multiple representations.
	REQUIRED **3d) *Balance:*** The three aspects of rigor are not always treated together and are not always treated separately.	**Yes**	The three aspects of rigor are not always treated together or separately within the instructional materials. LSSM, with a focus on procedural skill and fluency, are addressed throughout the curriculum and through the Mixed Practice portion of the homework resources provided. LSSM aligned to the application component of rigor are addressed through real-world problems. For example, LSSM 8.G.C.9 is aligned to all components of rigor and is addressed in multiple lessons. In Unit 12, Cycle 1, Lesson 1, the focus is on the mathematical formula to determine the volume of a cylinder. In Lesson 2, the focus is on the mathematical formula to determine the volume of a cone. In Lesson 3, the focus is on the mathematical formula to determine the volume of a sphere. Lesson 4 culminates with the application of the volume formulas of a cylinder, cone, and sphere to real-world scenarios.
Non-Negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in both teacher and student materials.	**Yes**	The practice standards enrich the content standards for the grade level. Section I, “Alignment to the Louisiana Student Standards for Mathematics,” emphasizes the alignment of the curriculum to the Standards for Mathematical Practice (MP). Each mathematical practice is discussed and the lesson begins with a “Get the Goof” question that notes the mathematical practice(s) likely used to determine the solution. For example, in Unit 7, Cycle

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
☒ Yes ☐ No			1, Lesson 3, students use MP.3 as they critique the mathematical work of Joseph as he attempted to find the slope of a line. In Unit 11, Cycle 2, Lesson 3, students could use MP.5 by using a number line as a mathematics tool to determine the validity of an answer, as suggested for the teacher. Students must often justify reasoning, construct viable arguments, persevere in their work, and find the error in work. Students are given opportunities to use practices, as mentioned in the Think Like a Mathematician notes found within each unit. For example, Unit 2, Cycle 1, Lesson 2 provides the opportunity to look for and express regularity of repeated reasoning (MP.8) when classifying numbers in the real number system using a Venn diagram repeatedly through the Teamwork, Quick Check, and Homework components of the lesson. In addition, Unit 9, Cycle 1, Lesson 3, Teamwork Question 1 asks students to analyze a graph to interpret and make sense of information (MP.1) and to construct viable arguments (MP.3) to support their answers.
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion **5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:** Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards. ☐ Yes ☒ No	**REQUIRED** **5a)** Materials provide all students extensive work with course-level problems. Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.	**No**	The materials include problems outside of the grade level that are not identified for teachers or students. For example, in Unit 4, Cycle 1, Lesson 1, students are to decide if a given triangle is a right triangle. This problem aligns to fourth grade standards and there is no indication to the teacher or to the student that it is below grade level. Similarly, in Unit 5, Cycle 1, Lesson 1, students must decide what is wrong with Timoteos classification of “a trapezoid as a quadrilateral with two sets of parallel sides.” This problem aligns to fifth grade standards and is not identified as below grade level. In Unit 7, Cycle 2, Lesson 1, students critique Saundra’s work on solving for a missing value in a proportion. This problem aligns to seventh grade standards but is not identified as below grade level. Students critique Quinn’s work on solving the area of a given circle in Unit 12, Cycle 1, Lesson 1, which aligns with seventh grade standards but is not identified as below grade level.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	REQUIRED **5b)** Materials relate course-level concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.	**Yes**	The materials relate course-level concepts to prior knowledge from earlier grades and are designed so that prior knowledge becomes reorganized and extended to accommodate the new learning. For example, in Unit 3, Cycle 2, Lesson 1, prior knowledge from fifth grade (LSSM. 5.NBT.A.2) is reorganized so that students are able to apply multiplication with patterns of 10 to their understanding the relative size of the numbers written in scientific notation. The conceptual understanding of multiplication by powers of 10 progresses toward understanding that numbers expressed by powers of 10 can be extremely large or extremely small (LSSM 8.EE.A.3). Additionally, Unit 6, Cycle 2, Lesson 3, Dilations on the Coordinate Plane focuses on LSSM 8.G.A.3 and 8.G.A.4. The instruction is scaffolded initially by activating prior knowledge of the use of scale factors to enlarge or reduce a figure (LSSM 7.G.A.1). The lesson transitions into analyzing similar rectangles on the coordinate plane and toward creating dilations.
	5c) Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.	**No**	The materials include learning objectives that are not clearly aligned to the LSSM for the grade level. For example, in Unit 3, Cycle 1, Lesson 1, the lesson objective is to "apply the laws of combining and simplifying exponents with integers." The objective from Lesson 4 is to "Simplify the square root of non-perfect squares." Both objectives emphasize simplifying, which is not part of the LSSM. LSSM 8.EE.1 to "know and apply the properties of integer exponents to generate equivalent numerical expressions," and LSSM 8.EE.2 to "Use square root and cube root symbols to represent solutions to equations of the form $x^2=p$ and $x^3=p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that$\sqrt{2}$ is irrational" relate to these objectives, but lack the clarity and intent of the standards. In Unit 6, Cycle 1, Lesson 2, the learning objectives are to "Learn the vocabulary associated with lines and transversals" and to "Identify the types of angles formed by sight." These

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			objectives are not visibly shaped by LSSM 8.G.5 which requires students to "Use informal arguments to establish facts about the angle sum and exterior angles of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles." The lesson objectives for Unit 7, Cycle 1, Lesson 1, are to "Analyze the cost of two or more items on a graph or in a table" and to "Compare the graphs." These objectives are not visibly shaped by LSSM 8.EE.5 which requires students to "Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways."
Additional Criterion **6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:** Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards. ☒ Yes ☐ No	**REQUIRED** **6a)** Materials attend to the full meaning of each practice standard. Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard. Alignments to practice standards are accurate.	**Yes**	The instructional materials attend to the full meaning of each math practice standard. Each lesson provides opportunities for the students to complete meaningful work with the math practice standards, or "Thinking Like A Mathematician." For example, Unit 3, Cycle 3, Lesson 3, provides a Team Huddle problem where students are asked, "How many times smaller was the carrying capacity of the Cowlitz River after the eruption? Write your answer in scientific notation." After answering each question, the students are expected to provide a rationale for how the problem was derived by using a lesson routine called, "Think Like a Mathematician." Additionally, in Unit 11, Cycle 1, Lesson 1, specific connections are made in the teacher guidance stating that students should be reasoning abstractly and quantitatively (MP.2) by "writing simultaneous equations to represent situations and translate it into math." In Lesson 2, students are to create math models (MP.4) that "map the relationships in the problem with algebra to find a solution to the system" and to use the "structure of equations to eliminate a variable" (MP.7).
	REQUIRED **6b)** Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level	**Yes**	The materials provide sufficient opportunities for students to construct viable arguments and critique the reasoning of others through "Get the Goof" problems that are provided at the opening of each

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	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.		lesson. Students analyze the work of others, determine errors, and explain their reasoning based on mathematical evidence. For example, in Unit 4, Cycle 2, Lesson 2, students analyze Raul's work on applying the Pythagorean Theorem to classify a triangle as obtuse. In Unit 7, Cycle 1, Lesson 3, students critique Joseph's ability to find the slope of a line. On page 33 of the Comprehensive guide it is explained that "Through a dynamic process of teacher modeling, reinforcement, and assessment, students become actively engaged in working through problems and explaining their thinking with partners and teams."
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	**Yes**	In the Scope and Sequence, the Mathematical Practices are listed as aligned to each individual lesson. There are also additional materials outlining the practice standards in the Power Teaching Math Guide provided. Each Unit Overview section also provides teachers the "Think Like a Mathematician" practices used within the materials. These directly mimic the standards for mathematical practice and are embedded in lesson instruction. The Comprehensive Resource Guide for Teachers and Leaders provides an explanation that "mastery of the mathematical practice standards are integral to the student's ability to become mathematically proficient" (page 46). Also included in the curriculum materials are videos with course-level problems that further display how each math practice is used in the course.
	6d) Materials explicitly attend to the specialized language of mathematics.	**Yes**	The instructional materials focus on the development of appropriate grade-level mathematical language. Each lesson provides a focus on new vocabulary terms and their application within the lesson. In the Guide to Resources, students are awarded team celebration points for a variety of reasons, including "finding math vocabulary in home reading and defining it correctly" in the Vocabulary Vault using a Vocabulary Voucher. In Unit 6, Cycle 1, Lesson 2, Lines and Transversals, the objectives are to "Learn the vocabulary associated with lines and

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			transversals" and to "Identify the types of angles formed by sight." The lesson focuses on all essential mathematical terms related to angle relationships. Students use precise math language regularly when providing solutions to problems along with their rationale in the classroom routine as a "Random Reporter" where they are encouraged to explain the team's method for solving math problems.
Additional Criterion **7. INDICATORS OF QUALITY:** Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards. ☒ Yes ☐ No	**REQUIRED** **7a)** There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.	**Yes**	Students produce a variety of responses. For example, in Unit 5, Rigid Transformations, Cycle 1, students have a number of options for how to respond to the practice problems. In the Homework for Lesson 2, students perform transformations visually on the coordinate plane, where the Teamwork and Team Mastery problems have students provide verbal responses about differences between transformations and attributes of different transformations that will create the same image in the same location. The Lesson 3 Team Mastery assignment allows students to use various tools (e.g., protractors, grid paper, etc.) to sketch transformations of shapes on coordinate grids. Students are expected to explain their reasoning for creating their sketches.
	REQUIRED **7b)** There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of student responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Yes**	The instructional materials provide separate resources that support and reward teacher study. The Guide document, which is a comprehensive resource for teachers and leaders, and the Teacher Unit Guide both provide in-depth supplementary information to help math teachers implement the program in their classrooms. The Teacher Unit Guide includes guidance on how to explicitly instruct each lesson, scripted questions to help guide students to mastery on the math concepts, explanations on how the mathematical practices are used in the unit, and descriptions on how the math units are comprised. The Comprehensive resource guide provides guidance on how to structure math classrooms so that collaborative learning is maximized.
	7c) Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students.	**No**	Although the materials provide instruction on math vocabulary for all students, they do not provide specific support for English Language Learners and

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	The language in which problems are posed is carefully considered.		other special populations. While measures are in place to track individual mastery throughout the instructional materials, there is no evidence of support specific to diverse learners.
	7d) The underlying design of the materials distinguishes between problems and exercises. In essence, the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.	**Yes**	The underlying design of the materials distinguishes between problems and exercises. All new learning occurs as teacher-led direct instruction called guided practice. During guided practice, students solve problems. Lessons begin with a review problem called "Get the Goof" and provide an opportunity for students to work through a problem in layers, such as the Think Aloud problem in Unit 7, Cycle 1, Lesson 3, Comparing Proportional Relationships, where the teacher guides students through determining the slope of each linear representation and identifying which has the greatest rate of change in context. In the Team Mastery portion of the lesson, students complete exercises reinforcing the content learned during the Interactive Instruction and Guided Practice. In Unit 12, Cycle 1, Lesson 2, the teacher provides explicit instruction on solving for the volume of cones. Additional exercises are found at the end of each lesson in the Homework and Quick Check sections, where students apply their understanding of learned mathematical concepts.
	7e) Lessons are appropriately structured and scaffolded to support student mastery.	**Yes**	Lessons are structured and scaffolded to support student mastery, and intentionally model The Cycle of Effective Instruction. For example, in Unit 12, Cycle 1, Lesson 1, Volume of Cylinders, the lesson begins with students working with familiar formulas for the area of circles and the volume of rectangular prisms. In the guided instruction portion of the lesson, the teacher guides the students to an understanding that the volume of a cylinder can be found by thinking about how to find the area of a circle ($A=r^2\pi$), which is the base of a cylinder, then multiplying the area of the base by the height of the cylinder. The lesson continues with students working in teams to solve exercises that support their ability to find the volume of cylinders given data and figures. For example, as in the problem to

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			"Find the volume of the cylinder. Use 3.14 for π. Round to the nearest hundredth. A cylinder has a diameter of 12 km and a height of 1.9 km." Each lesson provides supplemental support with explanations for student learning in "The Guide on the Side." This document provides those assisting students outside of class with questions to ask that are relative to the content, as well as, supplemental resources to solidify understanding.
	7f) Materials support the uses of technology as called for in the Standards.	**Yes**	The materials support the use of technology. The LSSM for eighth grade requires that students graph linear equations, compare data sets, and perform transformations of two-dimensional shapes. Unit 13, Cycle 1, Lesson 5, uses a spreadsheet application to plot and analyze bivariate data. The materials also call for graphing calculators to complete exercises through many of the lessons in Units 9-11 which involve linear equations, systems of linear equations, and functions. However, there is no evidence found in Unit 3 instructional materials related to the interpretation of scientific notation that has been generated by technology (LSSM 8.EE.A.4).

FINAL EVALUATION

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

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

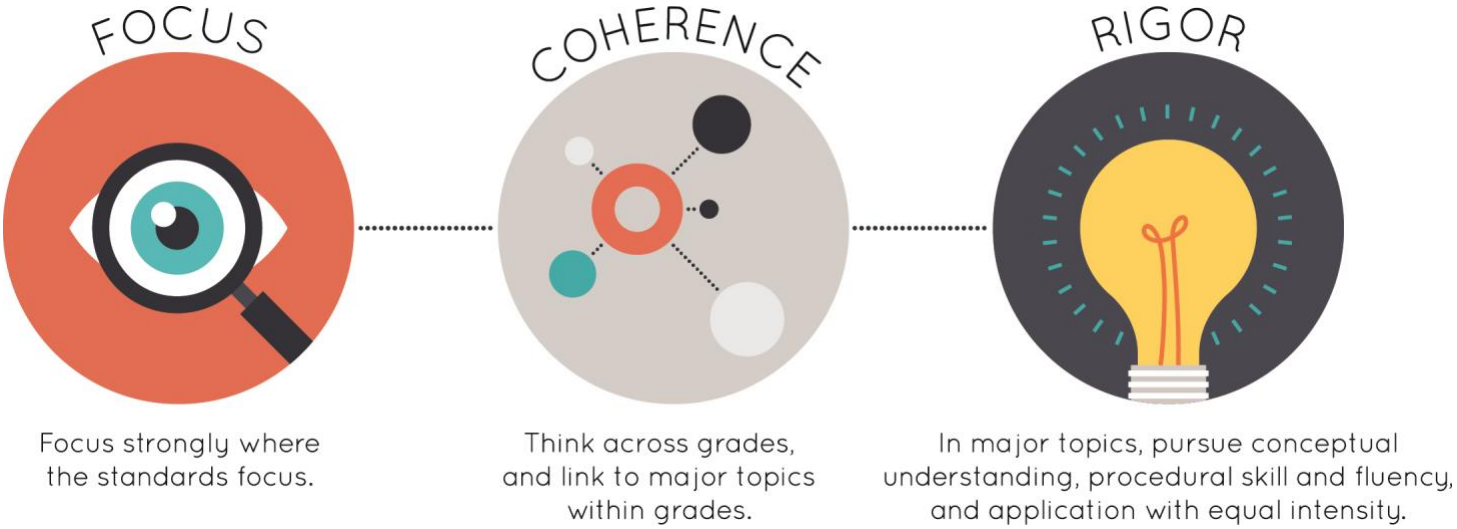
Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

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

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	**Yes**	The materials devote a majority of class time to the major work of the grade (69.31%) and spend minimal time on content outside the requirements of the LSSM for the grade level.
	2. Consistent, Coherent Content	**Yes**	Focus and coherence are enhanced throughout the curriculum through connections between supporting and major LSSM, as well as through connections made between different domains and sub-claims.
	3. Rigor and Balance	**Yes**	The three aspects of rigor are not always treated together or separately within the curriculum.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	4. Focus and Coherence via Practice Standards	**Yes**	The materials use the math practice standards to strengthen and enrich the focus of the content standards for the grade.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**No**	The materials include problems outside of the grade level that are not identified for teachers or students. Learning objectives are not clearly aligned with the LSSM for the grade level.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	The materials attend to the full meaning of each practice standard. There are teacher-directed materials that explain the role of the practice standards and explicitly attend to the specialized language of mathematics.
	7. Indicators of Quality	**Yes**	Students produce a variety of responses and utilize technology where appropriate. Lessons are scaffolded and identify the difference between problems and exercises. However, there is no support for special populations of students.
FINAL DECISION FOR THIS MATERIAL: **Tier II, Approaching quality**			

Strong mathematics instruction contains the following elements:



Title: **PowerTeaching Math 3rd Edition**

Grade/Course: **Algebra 1**

Publisher: **Success for All Foundation**

Copyright: **2015**

Overall Rating: **Tier II, Approaching quality**

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

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

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

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
Non-Negotiable **1. FOCUS ON MAJOR WORK[7]:** Students and teachers using the materials as designed devote the large majority[8] of time to the major work of the grade/course. ☒ Yes ☐ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.	**Yes**	The materials devote a large majority of class time to the major work of the grade. The Scope and Sequence and Curriculum Map for Louisiana indicates that major content standards, as defined by the Louisiana State Standards for Mathematics (LSSM), are addressed in 65.09% of the Algebra 1 curriculum.
	REQUIRED **1b)** In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment materials, there are no chapter tests, unit tests, or other such assessment components that make students or teachers responsible for any topics before the grade/course in which they are introduced in the Standards.	**Yes**	The instructional materials spend minimal time on content that is outside of the LSSM for Algebra I. Content lessons that extend and scaffold instruction are listed as optional. Assessment items pertain to the mathematical language, appropriate number system, and content standards for the grade level. For example, see the Unit 5, Unit Check, Question 2 where students analyze a graph of a system of linear equations to estimate the cost of one package of napkins and one package of cups (LSSM A-REI.C.6). In Question 3, students solve a system of equations by graphing (LSSM A-REI.C.6). In Question 5, students solve a given system of equations using technology (LSSM A-REI.D.11). In Unit 12, Cycle 3, Lesson 3, the Performance Task requires students to create and analyze graphs of, and solve quadratic equations in a real-world context, such as in hotel revenue. Students apply this concept to determine key features of given parabolic graphs and justify their responses using algebraic reasoning (LSSM A-REI.B.4).
Non-Negotiable **2. CONSISTENT, COHERENT CONTENT** Each course's instructional materials are coherent and consistent with the content in the	**REQUIRED** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.	**Yes**	The instructional materials reflect meaningful connections between supporting and major content to enhance focus and coherence throughout the year. For example, supporting standards LSSM A1.F-LE.A.1, A1.F-LE.A.2, A1.F-LE.A.3, and A1.F-LE.B.5 are connected to major standard LSSM A1.F-BF.A.1, in Unit 9, Cycle 2, Lessons 1 - 3, Performance Tasks where students explore the costs of commuting for

[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
Standards. ☒ Yes ☐ No			various modes of transportation. In addition, supporting standard LSSM A1.N-Q.A.2 is connected to major standards LSSM A1. A-SSE.A.1, A1. A-CED.A.2, and A1.A-REI.B.3 in Unit 14, Cycle 2, Lessons 1 - 3, Performance Tasks where students explore the mathematics of genetics in a population.
	REQUIRED **2b)** Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade/course, in cases where these connections are natural and important.	**Yes**	The instructional materials include problems and activities that serve to connect two or more clusters in a domain or two or more domains where these connections are natural and important. For example, in Unit 7, Cycle 1, Lesson 3, two conceptual categories are connected by having students find an appropriate domain (LSSM A1.FIF.B.5) using knowledge about units (LSSM A1. N.Q.A.1). In addition, in Unit 13, Cycle 1, Lesson 5 connects LSSM A1.F-IF.C.9 and LSSM A1.F-LE.A.3, as students compare various function types in a table, function, or graphical format, observing that exponential functions increase at a faster rate than the other types of functions.
Non-Negotiable **3. RIGOR AND BALANCE:** Each grade's instructional materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application. ☒ Yes ☐ No	**REQUIRED** **3a)** ***Attention to Conceptual Understanding:*** Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and discussion questions.	**Yes**	The instructional materials enhance the development of the conceptual understanding of key mathematical concepts, especially where called for in the content standards. Each lesson opens with "Get the Goof" where students must use prerequisite skills to identify and correct a misconception. During Teamwork Mastery, students work together on a series of problems as well as reflect on key "how" and "why" questions about the meaning of the mathematics which requires them to dig deeper to relate patterns and rules. In addition, the homework component, "For Guide on the Side," offers conceptual understanding probes for parents to pose to their children. Unit 6, Cycle 1, Lesson 1, provides opportunities for students to develop a conceptual understanding of a function (LSSM A1.F-IF.A.1). Students analyze tables, graphs, and relationships to determine and explain their reasoning. In Unit 3, Cycle 2, Lesson 1, students demonstrate their conceptual understanding of solving linear equations by justifying their reasoning at each step (LSSM A1.REI.A.1).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	REQUIRED **3b) *Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	The materials enhance the development of procedural skill and fluency of key mathematical concepts, especially where called for in the LSSM. In addition, an opportunity in each lesson, called "Mixed Practice," focuses on Algebra I standards taught in previous units. For example, Unit 3, Cycle 1, Lesson 4, and Unit 12, Cycle 1, Lesson 3, focus on LSSM A-CED.A.4 and provide multiple practice problems through the Teamwork, Quick Check, and Homework sections to ensure student fluency in solving formulas for given variables. Unit 3, Cycle 2, Lesson 2, aligns to LSSM A1. A-REI.B.3, which focuses on procedural skill and fluency, and provides opportunities for students to fluently solve one-variable linear equations through the instructional examples as well as the homework sheet. Additionally, in Unit 14, Cycle 1, Lesson 2, students fluently use Pythagorean Theorem to find the missing side length (LSSM 8.G.B.7).
	REQUIRED **3c) *Attention to Applications:*** Materials are designed so that teachers and students spend sufficient time working with engaging applications, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/course, afford opportunities for practice, and engage students in problem solving. The problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit.	**Yes**	The instructional materials are designed to provide sufficient opportunity for engaging applications through real-world problems throughout the student materials and Performance Tasks. For example, in Unit 3, Cycle 3, students create a school lunch menu through the use of equations and inequalities (LSSM A-CED.A.3, A-REI.B.3). In addition, Unit 10, Cycle 2, Lesson 2, the application of LSSM A1. S-ID.B.6a is highlighted as students construct scatter plots within given real-world contexts.
	REQUIRED **3d) *Balance:*** The three aspects of rigor are not always treated together and are not always treated separately.	**Yes**	The three aspects of rigor are not always treated together or separately within the instructional materials. LSSM, with a focus on procedural skill and fluency, are addressed throughout the curriculum and through the Mixed Practice portion of the homework resources provided. LSSM aligned to the application component of rigor are addressed through real-world problems. For example, LSSM A1.A-CED.A.1 is aligned to all components of rigor

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			and is addressed in multiple areas throughout the materials. Unit 3, Cycle 1, Lesson 1, provides students with opportunities to explain how to create and solve equations and inequalities, solve for a given variable, and create and solve equations and inequalities for real-world scenarios. Additionally, in Unit 12, Cycle 1, Lesson 1, students create and solve linear, exponential, and quadratic equations and inequalities.
Non-Negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards. ☒ Yes ☐ No	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in both teacher and student materials.	**Yes**	The practice standards enrich the content standards for the grade level. Section I, "Alignment to the Louisiana Student Standards for Mathematics," emphasizes the alignment of the curriculum to the Standards for Mathematical Practice (MP). Each mathematical practice is discussed and the lesson begins with a "Get the Goof" question that notes the mathematical practice(s) likely used to determine the solution. In addition, the Standards of Mathematical Practice are noted for each lesson in the Scope and Sequence document. For example, Unit 2, Cycle 1, Lesson 1, uses MP.4 as students make a model to make sense of the unit's problem. Unit 5, Cycle 1, Lesson 1, uses MP.6 as students use the precise order of coordinates to determine if a point is on the given line. Students often justify reasoning, construct viable arguments, persevere in their work, and find the error in work. Students are given opportunities to use practices, as mentioned in the Think Like a Mathematician notes found within each unit. For example, Unit 6, Cycle 1, focuses on defining functions, where students are given many opportunities to analyze models and model with mathematics to build a formal understanding of relationships that represent functions (MP.4).
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion **5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:** Materials foster focus and	**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	**No**	The materials include problems outside of the grade level that are not identified for teachers or students. For example, Unit 2, Cycle 1, Lesson 1, provides an initial problem in "Get the Goof" that states, "Ming found the area in square feet: 49 $in.^2 \div 12$ in. = 4.083 ft^2. What's wrong with his thinking?" This

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards. ☐ Yes ☒ No	specific responsibility is for the current year.		problem aligns with LSSM 6.RP.A.3d and is not identified as below grade level for the teacher or the student. In Unit 5, Cycle 1, Lesson 1, students critique Kendra's statement that "(4, -2) is a point on the line." The line is provided for students on a coordinate graph. This problem represents below grade level course work that is not identified for the teacher or student. In Unit 11, Cycle 1, Lesson 1, students critique Luis who claims the product of 2x and 2x is 4x. This problem represents below grade level coursework that is not identified for the teacher or student.
	REQUIRED **5b)** Materials relate course-level concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.	**Yes**	The materials relate course-level concepts to prior knowledge from earlier grades and are designed so that prior knowledge becomes reorganized and extended to accommodate the new learning. For example, Unit 2, Cycle 1, Lesson 3, the guided instruction portion provides direct instruction on how to create proportions of given data in order to create scaled quantities and then graph the values on a coordinate grid. This lesson extends the understanding of proportional relationships and graphing proportional relationships (LSSM 7.RP.2 and 8.EE.B.5) towards assessing the most appropriate units to respond to real-life situations (LSSM N.Q.A.1). In Unit 7, Cycle 1, Lesson 1, Rate of Change, the focus is on calculating the average rate of change given multiple representations connecting LSSM 8.F.A.3 and 8.EE.B.5 to LSSM F.IF.B.6s. In addition, the "Get the Goof" problem, at the beginning of the lesson, activates prior knowledge of rate of change through the following prompt, "Sienna said the equation for the graphed function is y = 3x + 2 because the line goes through (0, 3), and when x changes by 1, you add 2 to y. What's wrong with her thinking?"
	5c) Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.	**No**	The materials include learning objectives that are not clearly aligned to the LSSM for the grade level. For example, Unit 2, Cycle 3, the lesson objectives are to "Write math statements to represent complicated linear and exponential expressions" and to "Write complicated expressions for

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			contextual situations." These are to align with LSSM A.SSE.A.1b requiring students to "Interpret complicated expressions by viewing one or more of their parts as a single entity." While some of the same words are shared, the intent of the standard is missing from the objectives. The first three lessons of Unit 4, Cycle 1, are aligned to eighth grade standards and include objectives that reflect them. The objective in Unit 4, Cycle 1, Lesson 4, is to "Simplify numeric and algebraic expressions involving rational exponents." The emphasis on simplification is not part of LSSM and the objective is not visibly shaped by LSSM N.RN.A.1 that requires students to "Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents."
Additional Criterion **6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:** Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards. ☒ Yes ☐ No	**REQUIRED** **6a)** Materials attend to the full meaning of each practice standard. Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard. Alignments to practice standards are accurate.	**Yes**	The instructional materials attend to the full meaning of each math practice standard. Each lesson provides opportunities for the students to complete meaningful work with the math practice standards, or "Thinking Like A Mathematician." For example, Unit 2, Cycle 1, Lesson 3, calls for students to use their knowledge of units to create and interpret data in graphs. In the Scope and Sequence, several math practices (e.g., MP.1, MP.3, MP.4, MP.6, and MP.7) are shown as present in the materials. In Unit 9, Cycle 1, Lesson 1, students begin by critiquing the reasoning of others (MP.3) in the "Get the Goof" exercise, then throughout the lesson students make sense of problems and persevere in solving them (MP.1) as this math practice is referenced throughout the Teacher Unit Guide for this lesson. In Lesson 2, students begin to notice structure (MP.7) while analyzing multiple representations of linear and exponential functions.
	REQUIRED **6b)** Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level	**Yes**	The materials provide sufficient opportunities for students to construct viable arguments and critique the reasoning of others through "Get the Goof" problems that are provided at the opening of each lesson. For example, Unit 4, Cycle 1, Lesson 1,

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	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.		Properties of Integer Exponents, students must respond to the following question, "Mai said that $2^3 = 6$. What's wrong with her thinking?" In Unit 6, Cycle 2, Lesson 3, students critique and correct the reasoning a person makes about linear and exponential functions represented in a table. On page 33 of the Comprehensive guide it is explained that "Through a dynamic process of teacher modeling, reinforcement, and assessment, students become actively engaged in working through problems and explaining their thinking with partners and teams."
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	**Yes**	In the Scope and Sequence, the Mathematical Practices are listed as aligned to each individual lesson. There are also additional materials outlining the practice standards in the Power Teaching Math Guide provided. Each Unit Overview section also provides teachers the "Think Like a Mathematician" practices used within the materials. These directly mimic the standards for mathematical practice and are embedded in lesson instruction. The Comprehensive Resource Guide for Teachers and Leaders provides an explanation that "mastery of the mathematical practice standards are integral to the student's ability to become mathematically proficient" (page 46). Also included in the curriculum materials are videos with course-level problems that further display how each math practice is used in the course.
	6d) Materials explicitly attend to the specialized language of mathematics.	**Yes**	The instructional materials focus on the development of appropriate grade-level mathematical language. Each lesson provides a focus on new vocabulary terms and their application within the lesson. In the Guide to Resources, students are awarded team celebration points for a variety of reasons, including "finding math vocabulary in home reading and defining it correctly" in the Vocabulary Vault using a Vocabulary Voucher. In Unit 6, Cycle 1, Lesson 1, new terms such as, "relation," "function," "independent variable," and "dependent variable," and examples of their application are followed by

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Lesson 2 where students are introduced to the terms, “domain,” “range,” and “real numbers.” Students use precise math language regularly when providing solutions to problems along with their rationale in the classroom routine as a “Random Reporter” where they are encouraged to explain the team’s method for solving math problems.
Additional Criterion **7. INDICATORS OF QUALITY:** Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards. ☒ Yes ☐ No	**REQUIRED** **7a)** There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.	**Yes**	Students produce a variety of responses. For example, the LSSM requires students to produce sketches of graphs, tables, equations, and other models, and also provide a rationale for the answers given or to counter arguments from teammates. In the Homework exercises for Unit 3, Cycle 1, Lesson 4, students must respond in the form of an equation, written explanations, and graphs of linear representations and inequalities. In Unit 8, Cycle 1, Lesson 1, students must graph a function on graph paper and identify intercepts. In the Team Huddle, students are expected to verbally explain how they solved the problem.
	REQUIRED **7b)** There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of student responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Yes**	The instructional materials provide separate resources that support and reward teacher study. The Guide document, which is a comprehensive resource for teachers and leaders, and the Teacher Unit Guide both provide in-depth supplementary information to help math teachers implement the program in their classrooms. The Teacher Unit Guide includes guidance on how to explicitly instruct each lesson, scripted questions to help guide students to mastery on the math concepts, explanations on how the mathematical practices are used in the unit, and descriptions on how the math units are comprised. The Comprehensive resource guide provides guidance on how to structure math classrooms so that collaborative learning is maximized.
	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.	**No**	Although the materials provide instruction on math vocabulary for all students, they do not provide specific support for English Language Learners and other special populations. While measures are in place to track individual mastery throughout the instructional materials, there is no evidence of support specific to diverse learners.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	7d) The underlying design of the materials distinguishes between problems and exercises. In essence, the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.	**Yes**	The underlying design of the materials distinguishes between problems and exercises. All new learning occurs as teacher-led direct instruction called guided practice. During guided practice, students solve problems. Lessons begin with a review problem called "Get the Goof" and provide an opportunity for students to work through a problem in layers, such as the Think Aloud problem in Unit 3, Cycle 1, Lesson 4, where students work through instructions with the teacher to solve for a particular variable in a formula. Additional exercises are found at the end of each lesson in the Homework and Quick Check sections, where students apply their understanding of learned mathematical concepts. For example, one problem states that "The formula for investment at compound interest is $A=P(1+r)^t$. Solve for P." This homework exercise reinforces the mathematics learned during the lesson.
	7e) Lessons are appropriately structured and scaffolded to support student mastery.	**Yes**	Lessons are structured and scaffolded to support student mastery, and intentionally model The Cycle of Effective Instruction. For example, in Unit 7, Cycle 1, Lesson 2, a Think Aloud problem supports student learning on how to analyze the graph of a function, which is then followed by multiple practice exercises that promote team collaboration, as well as individual work time. For example, students work with their team during Team Huddle and are told, "Mr. Eric graphed the volume of tea in his restaurant's drink dispenser for 50 seconds. Describe what is happening in the graph in terms of the context." Each lesson provides supplemental support with explanations for student learning in "The Guide on the Side." This document provides those assisting students outside of class with questions to ask that are relative to the content, as well as supplemental resources to solidify understanding.
	7f) Materials support the uses of technology as called for in the Standards.	**Yes**	The materials support the uses of technology. For example, Unit 5, Cycle 1, focuses on LSSM A.REI.D.11 to "Explain why the x-coordinates of the points where the graphs of the equations y = f(x) and y = g(x) intersect are the solutions of the equation f(x) =

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			g(x); find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations." The unit overview states, "Your students will also use graphing software to help them solve systems of equations or to approximate the solutions. Your students may use whatever graphing software you have ready and have most abundant access to. This may be graphing calculators or an online graphing software like www.desmos.com." Graphing software and spreadsheets are also called for in multiple lessons within Units 8-10.

FINAL EVALUATION

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

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

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

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

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	**Yes**	The materials devote a majority of class time to the major work of the grade (65.09%) and spend minimal time on content outside the requirements of the LSSM for the grade level.
	2. Consistent, Coherent Content	**Yes**	Focus and coherence are enhanced throughout the curriculum through connections between supporting and major LSSM, as well as through connections made between different domains and sub-claims.
	3. Rigor and Balance	**Yes**	The three aspects of rigor are not always treated together or separately within the curriculum.
	4. Focus and Coherence via Practice Standards	**Yes**	The materials use the math practice standards to strengthen and enrich the focus of the content standards for the grade.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**No**	The materials include problems outside of the grade level that are not identified for teachers or students. Learning objectives are not clearly aligned with the LSSM for the grade level.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	The materials attend to the full meaning of each practice standard. There are teacher-directed materials that explain the role of the practice standards and explicitly attend to the specialized language of mathematics.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	7. Indicators of Quality	**Yes**	Students produce a variety of responses and utilize technology where appropriate. Lessons are scaffolded and identify the difference between problems and exercises. However, there is no support for special populations of students.
FINAL DECISION FOR THIS MATERIAL: **Tier II, Approaching 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.