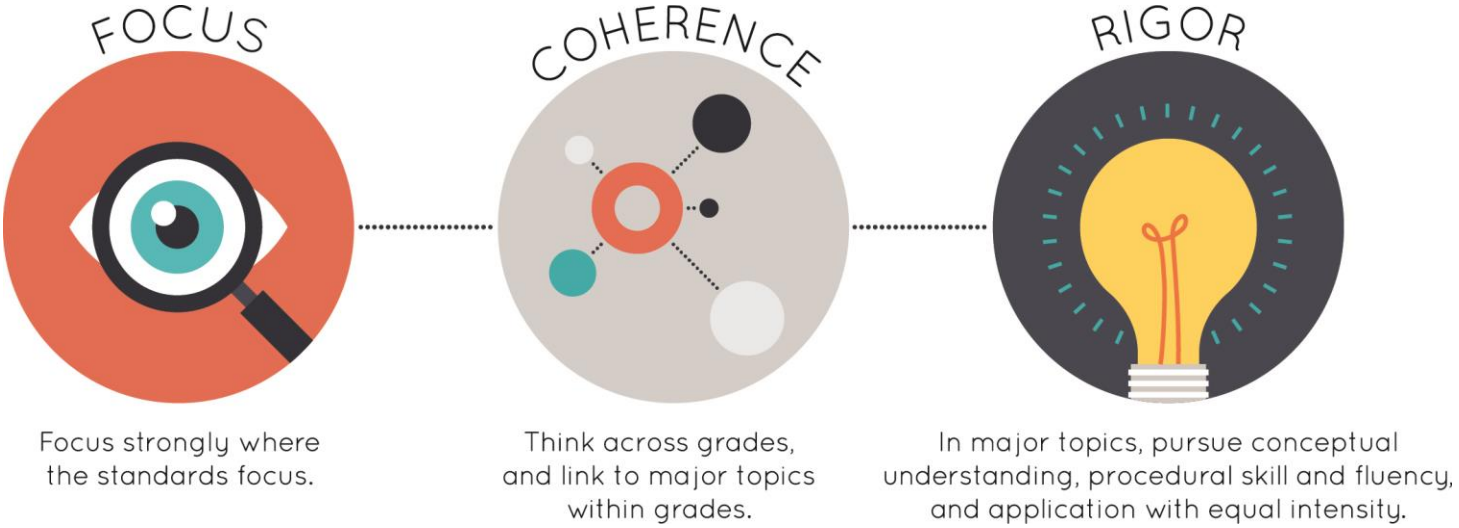
Instructional Materials Evaluation Tool for Alignment in Mathematics Grades K – 12 (IMET)

FULL CURRICULUM
Instructional Materials

Qualified for Abbreviated Review[1]

Strong mathematics instruction contains the following elements:



Title: **Eureka Math[2]**

Grade/Course: **6-8**

Publisher: **Great Minds PBC**

Copyright: **2021**

Overall Rating: **Tier 1, Exemplifies quality**

Tier 1, Tier 2, Tier 3 Elements of this review:

STRONG	WEAK
1. Focus on Major Work (Non-negotiable)	
2. Consistent, Coherent Content (Non-negotiable)	
3. Rigor and Balance (Non-negotiable)	
4. Focus and Coherence via Practice Standards (Non-negotiable)	
5. Alignment Criteria for Standards for Mathematical Content	
6. Quality of Assessments	
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 1) Grade 7 (Tier 1) Grade 8 (Tier 1)

[1] Abbreviated Reviews are conducted in K-12 ELA and K-12 Math for submissions that **Meet Expectations** for Gateways 1 and Gateway 2 through EdReports. Reviewers considered these reports as they reviewed materials for alignment to Louisiana state standards and quality Non-negotiable indicators. See the full EdReports review at https://www.edreports.org/reports/overview/eureka-math2-2021.

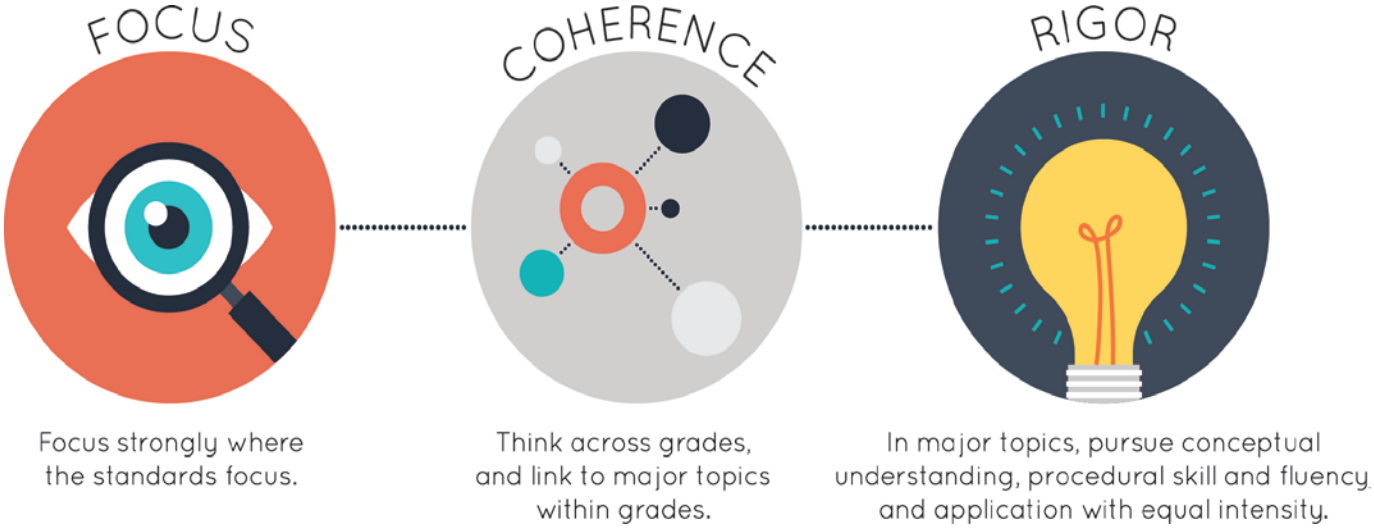
DEPARTMENT of EDUCATION
Louisiana Believes

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

FULL CURRICULUM
Instructional Materials

Qualified for Abbreviated Review[1]

Strong mathematics instruction contains the following elements:



Title: **Eureka Math[2]**

Grade/Course: **6**

Publisher: **Great Minds PBC**

Copyright: **2021**

Overall Rating: **Tier 1, Exemplifies quality**

Tier 1, Tier 2, Tier 3 Elements of this review:

STRONG	WEAK
1. Focus on Major Work (Non-negotiable)	
2. Consistent, Coherent Content (Non-negotiable)	
3. Rigor and Balance (Non-negotiable)	
4. Focus and Coherence via Practice Standards (Non-negotiable)	
5. Alignment Criteria for Standards for Mathematical Content	
6. Quality of Assessments	
7. Indicators of Quality	

[1] Abbreviated Reviews are conducted in K-12 ELA and K-12 Math for submissions that **Meet Expectations** for Gateways 1 and Gateway 2 through EdReports. Reviewers considered these reports as they reviewed materials for alignment to Louisiana state standards and quality Non-negotiable indicators. See the full EdReports review at https://www.edreports.org/reports/overview/eureka-math2-2021.

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

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

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

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

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Section I: Non-negotiable Criteria of Superior Quality: Materials must meet Non-negotiable Criteria 1 and 2 for the review to continue to Non-negotiable Criteria 3 and 4. Materials must meet all of the Non-negotiable Criteria 1-4 in order for the review to continue to Section II.			
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 devote the **majority** of class time to the major work of each grade/course.	**Yes**	Materials devote a large majority of time to the major work of the grade. Of the 114 instructional lessons, 69% of the lessons are spent on major work of the grade. Specifically, 58% of the lessons focus on major standards alone, 11% of the lessons focus on a combination of major standards and supporting/additional standards, and 31% of the lessons are spent on supporting or additional standards.
	Required **1b)** Instructional materials, including assessments, spend minimal time on content outside of the appropriate grade/course **during core math instruction**. Content beyond grade/course-level should be clearly labeled as optional.	**Yes**	Materials spend minimal time on content outside of the appropriate grade level. In assessment materials, assessment components do not make students/teachers responsible for any topics before they are introduced. All lessons across the topics are related to grade-level work and aligned to the Louisiana State Standards for Mathematics (LSSM) for Grade 6. Optional lessons are clearly labeled in the Teach guides and Year at a Glance document in the teacher's digital resources. For example, Module 2, Lesson 5, The Euclidean Algorithm is labeled as optional. In addition, the materials include a Louisiana Teacher Alignment Guide that provides modifications to lessons, lesson components, and assessment items to

[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%.

			ensure full alignment to the Louisiana Student Standards for Mathematics (LSSM). The guide notes which lessons to omit and includes additional lessons to meet the full intent of the standards. In addition, guidance is provided to omit certain Achievement Descriptors and assessment items that do not align with the Grade 6 LSSM. For example, Module 6, Lessons 10 and 11 should be omitted according to the Alignment Guide. The guide includes replacement lessons, such as using Lesson 13.1 instead of Lesson 13, and implementation guidance, such as "Use the term range instead of mean absolute deviation" in the Topic C Overview, to ensure full alignment to the LSSM. For the Module 6 Assessment, the guide suggests replacing Item 2 with Item 2.1 and to omit Item 6. All other lessons align to the Grade 6 LSSM. For example, in Module 1, Lesson 14, students compare ratios using multiple strategies (major LSSM 6.RP.A.3a). In the fluency portion of the lesson, ratios are compared in tables using a common factor. This concept is extended in the launch and learn portion of the lesson, where ratios are compared in tables with no common factors. In the lesson assessment, students compare ratio tables and explain their reasoning.
Non-negotiable **2. CONSISTENT, COHERENT CONTENT** Each course's instructional materials are coherent and	**Required** **2a)** Materials connect **supporting content to major content** in meaningful ways so that focus and coherence are enhanced throughout the year.	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Major work is developed before lessons that address supporting standards. When supporting

consistent with the content in the Standards. ☒ Yes ☐ No			standards are addressed, the lessons reinforce the major work of the grade by connecting back to major standards. Module 5 addresses all of the supporting content of the grade and connects to major work found in the Expressions and Equations (EE) domain. This major work is developed prior to this module and then reinforced as students engage with supporting work. For example, in Module 4, Topic A, students write, interpret, and evaluate numerical expressions (LSSM 6.EE.A.1). In Topic B, students transition to writing, interpreting, and evaluating algebraic expressions and understand why and how to use variables to represent unknown quantities (LSSM 6.EE.A.2). Then, in Topic C, students write and identify equivalent algebraic expressions (LSSM 6.EE.A.3). As students progress to Module 5, they apply knowledge from Module 4 as they use develop and use formulas to find area, surface area, and volume, connecting supporting 6.G.A standards to major 6.EE.A standards. For example, in Module 5, Lesson 7, students find the area of a trapezoid (supporting LSSM 6.G.A.1). They compare their strategies using the distributive property to explain why the expressions are equivalent (major LSSM 6.EE.A.3, 6.EE.A.4). In Module 5, Lesson 12, students develop the surface area formula (supporting LSSM 6.G.A.4), then substitute numbers into the formula to determine if the expressions are equivalent (major LSSM 6.EE.A.4). Students also calculate

			surface area (supporting LSSM 6.G.A.4) by substituting specific values into the variables and solving the equation (major LSSM 6.EE.A.2c; 6.EE.B.7). Additionally, Module 5, Lesson 8 connects supporting LSSM 6.G.A.1 to major LSSM 6.RP.A.3b which was introduced in Module 1, Lesson 20 and 21. During the lesson, students compute the area of composite figures in real-world situations (LSSM 6.G.A.1) and calculate the area of a wall in the classroom assuming it needs to be painted, and then find the cost of the paint that would be needed (6.RP.A.3b).
	Required **2b)** Materials include problems and activities that serve to connect two or more **clusters in a domain**, or two or more **domains in a grade/course**, in cases where these connections are natural and important.	**Yes**	Materials include problems and activities that connect two or more clusters in a domain and/or two or more domains in the grade level where these connections are natural and important. Various lessons throughout the materials include standards from multiple clusters and/or domains. Module 4 connects the Expressions and Equations (EE) and Ratio and Proportional Relationships (RP) domains. In Module 4, Lesson 22, students use a graph to determine unknown values in a ratio table and on a double number line. Students write equations in two variables that represent ratio relationships and identify independent and dependent variables, connecting LSSM 6.RP.A.3 to LSSM 6.EE.C.9. In the Launch, students use a graph representing the height of a stack of quarters as the number of quarters increases to find unknown quantities of a table and double number line. During Learn, students use a table that represents

			the number of cans collected to the total amount of money earned. Student knowledge about writing ratios (LSSM 6.RP.A.3) is extended to writing equations (LSSM 6.EE.C9) to show that the total amount earned equals two times the number of cans sold. Module 6, Lesson 16 connects clusters A (Develop understanding of statistical variability) and B (Summarize and describe distributions) in the Statistics and Probability (SP) domain. During the lesson, students compare the center and spread of two data distributions (LSSM 6.SP.A.3) by using dot plots and box plots (LSSM 6.SP.B.4).
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 featuring high-quality conceptual problems and discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in the standards. Throughout each of the modules, the materials provide activities and discussion prompts to build conceptual understanding. At the end of the lessons, students demonstrate an understanding of the concepts presented in the lesson. The materials align with the rigor expectations specified in the standards. Students develop the concepts by using visual models, multiple representations, and manipulatives to build conceptual understanding. In Module 1, students develop conceptual understanding of ratios, rates, and percents through various models such as tape diagrams, double number lines, ratio tables, graphs, and equations that help students visualize the relationship between quantities. The various

			representations support students in developing multiple strategies to solve problems. For example, in Lesson 3, students use models and tape diagrams to understand the concept of ratio and ratio notation (LSSM 6.RP.A.1). Students use a picture of people sitting at a restaurant to write and explain multiple ratios involving blue and red shirts. Students then draw tape diagrams to represent ratios, such as the width and length of a photo, understanding that one unit in the tape diagram represents 1 cm. In Lesson 9, students examine addition and multiplication patterns in a graph of a ratio relationship and then solve problems using multiplication patterns while connecting the patterns to ratio tables, graphs, and double number lines. By the end of the lesson, students explain how they use multiplication patterns to solve problems and use the multiplication strategies to solve for the unknown quantities in ratio relationships (LSSM 6.RP.A.3a). In Module 3, Lesson 1, students plot positive and negative numbers on a number line (LSSM 6.NS.C.5). Throughout the lesson, real-world contexts, such as temperature and elevation are used to develop conceptual understanding of positive and negative numbers. Lastly, in Module 3, Lesson 6, students order rational numbers on a number line to interpret inequality statements of greater than and less than comparison of rational numbers (LSSM 6.NS.C.7; 6.NS.C.7a; 6.NS.C.7b).

	Required **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students **attain the fluencies and procedural skills** required by the content standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	Materials are designed so that students attain the fluencies and procedural skills required by the standards. Required fluencies are acquired through a progression of learning over time and throughout the course. Each lesson within the materials begins with a 5-7 minutes Fluency activity. The Fluency assignment for each lesson focuses on a skill needed to complete the lesson. In some lessons, students develop procedural skill and fluency by solving problems. In Module 1, Lesson 23, students calculate percents when given a part and the whole (LSSM 6.RP.A.3c). In addition, students solve problems where they choose a method to calculate the percent to build fluency within the skill. Module 2, Lesson 6 begins with students writing mixed numbers as fractions greater than one and fractions greater than one as mixed numbers. Continuing in Lesson 9, students divide a whole number by a unit fraction. Both of these fluency sections prepare students to divide fractions (LSSM 6.NS.A.1). In Module 2, Topic E, the primary focus is the division of multi-digit numbers (LSSM 6.NS.B.2). In Lesson 18, students complete several problems through guided instruction to divide numbers using the standard algorithm. Students use different strategies, such as estimation and the Euclidean Algorithm, to develop fluency when dividing multi-digit numbers. In Lesson 19, students use the standard algorithm to divide multi-digit whole

			numbers and write the quotient as a decimal.
	Required **3c)** ***Attention to Applications:*** Materials are designed so that teachers and students spend sufficient time working with **engaging applications**, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/course, afford opportunities for practice, and engage students in problem solving. The problems attend thoroughly to those places in the content standards where expectations for multi-step and real-world problems are explicit.	**Yes**	Materials are designed so that students spend sufficient time working with engaging applications. The materials include engaging real-world problems that require students to show reasoning and justification. The materials provide practice with single- and multi-step contextual problems that develop the mathematics for the grade and engage students in problem solving. The progression of the modules includes opportunities within the lessons to apply conceptual understanding and procedural skills within the context of real-world problems. Students answer questions in pairs, small groups, and whole groups where they justify and explain their reasoning. Throughout Module 1, students engage in several application problems involving ratio and ration reasoning. Module 1, Topic A introduces students to ratios and ratio notation. Students explore multiple ways to group and compare objects as they gain an understanding of equivalent ratios in real-world situations (LSSM 6.RP.A.3). Specifically, in Lesson 4, students apply their knowledge of ratios to determine the amount of each color that should go into batches of paint. The exit ticket includes an application problem utilizing ratios to determine the amount of each ingredient to put into a punch. In Module 2, Topic C, students learn how to divide fractions fluently (LSSM 6.NS.A.1). Lesson 12 is a digital lesson that provides

			students with a real-world scenario involving a box car. Throughout the lesson, the students solve problems with fractions and mixed numbers to build and race the box car. Students apply their knowledge of operations with fractions and mixed numbers to different real-world problems. Module 4 contains lessons that allow students ample time to work with application problems that develop the standards associated with the application component of rigor. For example, in Module 4, Lesson 19 students first solve a real-world application problem about putting money in a jar each day. Throughout the remaining portion of the lesson, students set up and solve equations using tape diagrams and algebraic reasoning (LSSM 6.EE.B.7).
	Required **3d) *Balance:*** The three aspects of **rigor** are not always treated together and are not always treated separately.	**Yes**	It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately. The materials reflect the balance of rigor in the standards. The structure of the materials helps students develop the concepts and skills necessary to build and apply math knowledge. Some lessons include two or three aspects of rigor, while other lessons include only one of the aspects of rigor. Module 2 focuses on operations with fractions and multi-digit numbers. In Topic B, students model fraction division with tape diagrams and number lines, reason about the relationship between multiplication and division, and interpret fraction division problems. Then, in Topic B, students focus

			on fluently dividing fractions (LSSM 6.NS.A.1). In Topics D-F, students build fluency with decimal operations (LSSM 6.NS.B.3) and division of whole numbers (LSSM 6.NS.B.2). In Module 3, Lesson 15, students find distance on the coordinate plane. The Fluency activity provides students the opportunity to practice finding the distance between two numbers on a number line. This prepares students to find the distance between two points on the coordinate plane by using absolute value (conceptual understanding). At the end of the interactive lesson, apply this understanding as they determine the distance between points to find their path through a maze (LSSM 6.NS.C.6). In Module 4, Lesson 16, integrates all components of rigor. Students apply the distributive property and combine like terms to find equivalent expressions fluently. Students then apply their knowledge of equivalent expressions by solving real-world problems. Lastly, students write a real-world problem that a given algebraic expression can represent LSSM 6.EE.B.6).
Non-negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Aligned materials make meaningful and purposeful connections that promote focus and coherence by connecting practice standards with content that is emphasized in the Standards. Materials address the	**Required** **4a)** Materials attend to the **full meaning of the practice standards**. Each practice standard is connected to grade/course-level content in a meaningful way and is present throughout the year in assignments, activities, and/or problems.	**Yes**	Materials attend to the full meaning of each practice standard. Each practice standard is connected to grade-level content and is meaningfully present throughout the materials. The materials support students' habits of mind based on the mathematical practices while also building conceptual understanding, developing fluency, and applying

practice standards in a way to enrich and strengthen the focus of the content standards instead of detracting from them. ☒ Yes ☐ No			understanding. Margin notes in the teacher materials provide cues and connections to the work of the students and the Standards for Mathematical Practice. Each lesson in the modules has a section titled, “Promoting the Standards for Mathematical Practice,'' which identifies the mathematical practice standards present in the lesson. This section also provides context of where Grade 6 students should be in the progression of the mathematical practices and questions that connect the practice standard to the content standard so that the practice standard is taught in collaboration. For example, in Module 2, Lesson 5, students look for and make use of structure (MP.7) as they work through the example of the Euclidean algorithm to calculate the greatest common factor. Students apply their understanding of removing squares from a rectangle to find the greatest common factor of two numbers (LSSM 6.NS.B.4). In Module 3, Lesson 9, students solve distance problems with absolute value by finding points and adjusting their thinking if needed (LSSM 6.NS.C.7d). Students make sense of the problem and persevere in solving it (MP.1) as they determine what strategies they could use to start solving the problem, explain the situation in their own words, and determine if their answer makes sense. In Module 5, Lesson 8, students model with mathematics (MP.4) as they determine the cost of the paint required to paint the wall of the classroom

			(6.G.A.1, 6.RP.A.3b.). They create a model, choose appropriate details, find measurements, and adjust their model as necessary. Because they revise their model, students apply MP.1 as they persevere through problem-solving.
	Required **4b)** Materials provide sufficient opportunities for students to **construct viable arguments and critique the arguments of others** concerning key grade/course-level mathematics that is detailed in the content standards (cf. MP.3). Materials engage students in problem solving as a form of argument, attending thoroughly to places in the standards that explicitly set expectations for multi-step problems.	**Yes**	Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics detailed in the content standards. The lessons are structured with opportunities for students to engage in mathematical reasoning through discussion questions and prompts. The materials provide opportunities for students to form viable arguments and critique the arguments of others throughout the lessons. Lessons also include several routines designed to promote discourse. For example, students determine a misconception in sample work and then construct viable arguments to correct the solution path or solution. The last lesson of each module provides students with the opportunity to apply all of the newly developed skills and concepts with group members on a collaborative task as they conduct an error analysis, critique the work of others, and/or justify their thinking. Similar opportunities are also provided throughout the materials. In Module 1, Lesson 1, students estimate the number of jelly beans in a jar. Students explain their strategy to the class and convince them it will work. The students also have to explain how their strategy can be changed. In Module 1, Lesson 5,

			students solve a problem about a bouquet of roses. The teacher facilitates a discussion of students' responses. During the discussion, students ask questions and critique others' work to engage in mathematical reasoning for their individual answers. In the same lesson, students work on different problems so they can share the answers with the class, contributing to student engagement and critiquing each other's work. In Module 3, Lesson 7, students use set criteria to design a town and then compare, critique, and justify their figures to their peers in a gallery walk. In Module 4, Lesson 13, students answer problems followed by a shared time in which students have the opportunity to engage in mathematical reasoning and justifications. Students work on problem 6, where they write two expressions representing the rectangle and its shaded region. Students then use the distributive property to simplify the expressions to see if two expressions are equivalent. Students check their answers (conduct error analyses) on their work and critique the work of others through a think, pair, and share activity.
	Required **4c)** Materials explicitly attend to the **specialized language** of mathematics.	**Yes**	Materials explicitly attend to the specialized language of mathematics. The materials use and encourage the use of accurate mathematical terminology as appropriate for the grade level. The Terminology Resource identifies the specialized language of mathematics that is used throughout a module. The resource lists New and Familiar

			terminology with definitions and descriptions from the module. Items in the New category are discipline-specific words that are introduced to students within the module. These items include the definition, description, or illustration as it is presented to students. Language Support margin notes embedded in the lessons provide guidance to teachers as they support students with the specialized language of mathematics. Each Module Overview and Module Assessment Description addresses the proper terminology for students to use as well as definitions for key terms. The sample dialogue in each lesson includes the terminology teachers should expect from their students when they answer questions or share their thinking. In Module 1, Topic E, percents are Introduced. Throughout the topic, the materials use the terminology part, whole, rate, ratio, and percent. Students are expected to understand the vocabulary and use it in explanations of problems. In Module 3, Lesson 3, Launch, students plot decimals on the number line. Guidance in the Language Support box suggests that teachers tell students that "consecutive integers are integers that follow one another when counting" and to share examples such as 1 and 2, 5 and 6, and -2 and -1. In addition, guidance suggests that teachers ask students to give an example and a nonexample of consecutive positive integers and consecutive negative integers. In Module 5, Lesson 5, the term

			kite is introduced. Throughout the lesson, vocabulary about the properties of kites, rectangles, squares, rhombuses, and quadrilaterals is used. Students respond to questions using correct vocabulary about parallel sides, and right angles and discuss the properties using the correct terminology. Module 6, Lesson 2 introduces the new term dot plot. The Language Support box directs teachers to have students label the dot plot from problem 1 to gain an understanding of what a dot plot is. Students then brainstorm characteristics of a dot plot. By the end of problem 1, students notice the numerical data values, that the dots are placed in vertical columns on a number line, and that each dot represents an observation.
	4d) There are teacher-directed materials that **explain the role of the practice standards** in the classroom and in students' mathematical development.	**Yes**	Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. The materials provide a full explanation of the purpose and intent of the practice standards with in-lesson connections and context for instruction. Each lesson contains a section entitled "Promoting the Standards for Mathematical Practice" that links a specific practice standard to the content of the lesson. The section provides the context of the progression of the standard in the current grade level and in future learning. It provides a specific reference of the lesson activity that implements the practice standard. At the conclusion of each Module, when

			reviewing achievement descriptors and standards, mathematical practice standards are listed for each module. Within the Implementation Guide, the mathematical practices are explained and highlighted in the margin notes as they appear in specific lessons. Additionally, in the Implementation Guide, the grade-level standards and practice standards are listed for educators as they are presented in all modules. In the section highlighting Lesson Facilitation, the guide describes effective delivery as "delivery that fosters student ownership and belonging. This curriculum supports this aspect by naturally presenting opportunities for students to practice the mathematical practice standards as they arise within the lessons." For example, in Module 1, Lesson 6, the Promoting the Standards for Mathematical Practice states, "Students look for and make use of structure (MP7) when they include additional values in ratio tables and double number lines to find equivalent ratios." Questions are provided to promote MP.7 such as "What is another way you can improve the ratio table and double number line that will help you represent the soda problem?" In Module 3, Topic B, Lesson 8, the students reason quantitatively and abstractly to find the magnitude of quantities in real-world situations. The following questions are provided to promote MP.2: "What does magnitude mean in this situation?" and "What real-world situations are modeled with magnitude?"

Section II: Additional Alignment Criteria and Indicators of Superior Quality			
5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards. ☐ Yes ☐ No	**Required** **5a)** Materials provide all students **extensive work** with grade/course-level problems.		See EdReports for more information.
	Required **5b)** Materials **relate grade/course-level concepts explicitly to prior knowledge** from earlier grades and courses. The materials are designed so that prior knowledge is extended to accommodate the new knowledge, building to core instruction, on grade/course-level work. Lessons are appropriately **structured and scaffolded** to support student mastery.		
	Required **5c)** There is **variety** in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade/course-appropriate way, arguments and explanations, diagrams, mathematical models, etc.		
	5d) Support for **English Language Learners and other special populations** is provided. The language in which problems are posed is not an obstacle to understanding the content, and if it is, additional supports (suggestions for modifications, "vocabulary to preview", etc.,) are included.		
6. QUALITY OF ASSESSMENTS: Materials offer assessment opportunities that genuinely measure progress and elicit direct, observable evidence of the degree to which students can independently demonstrate the assessed grade-specific Louisiana Student Standards for Mathematics.	**Required** **6a)** Multiple **assessment opportunities** are embedded into content materials and measure student mastery of standards that reflect the balance of the standards as presented in materials.		
	Required **6b)** Assessment items include a **combination of tasks** that require students to demonstrate conceptual understanding, demonstrate procedural skill and fluency, and apply mathematical reasoning and modeling in real world context. Assessment items require students to produce answers and solutions,		

☐ Yes ☐ No	arguments, explanations, and models, in a grade/course-appropriate way.		
	6c) Scoring guidelines and rubrics align to standards, incorporate criteria that are specific, observable, and measurable, and provide sufficient guidance for interpreting student performance, misconceptions, and targeted support to engage in core instruction.		
	6d) Materials provide 2-3 **comprehensive assessments** (interims/benchmarks) that measure student learning up to the point of administration.		
7. ADDITIONAL INDICATORS OF QUALITY: Materials are well organized and provide teacher guidance for units and lessons.	**Required** **7a)** The content can be **reasonably completed** within a regular school year and the pacing of content allows for maximum student understanding. The materials provide guidance about the amount of time a task might reasonably take.		
Materials provide timely supports to target specific skills/concepts to address students' unfinished learning in order to access grade-level work. ☐ Yes ☐ No	**Required** **7b)** The materials are **easy to use and well organized** for students and teachers. Teacher editions are concise and easy to manage with clear connections between teacher resources. Guidance is provided for lesson planning and instructional delivery, lesson flow, questions to help prompt student thinking, and expected student outcomes.		
	Required **7c)** Materials include unit and lesson **study tools for teachers**, including, but not limited to, an explanation of the mathematics of each unit and mathematical point of each lesson as it relates to the organizing concepts of the unit and discussion on student ways of thinking and anticipating a variety of student responses.		
	7d) Materials **identify prerequisite skills and concepts** for the major work of the grade/course, connected to the current on-grade/course-level work.	**Yes**	Materials identify prerequisite skills and concepts for the major work of the grade/course. Before a module that addresses the major work of the grade, the materials identify prerequisite skills needed to access grade 6 content. In the

			Module Overview, Before This Modules, provide prerequisite skills from previous grades or earlier in the current grade students need to be successful. In addition, the Pre-Module Assessment Overview lists essential foundational knowledge needed to access current grade-level content. For example, the Module 1 Overview describes that prerequisite skills are found in Grade 4, Module 2, and Grade 5, Module 6. It then explains that students have learned how to work with multiplicative data and how to solve problems, including the first quadrant of the coordinate plane. The Equip Module 2: Operations with Fractions and Multi-Digit Numbers Overview identifies essential foundational knowledge needed to access the content within Module 2 such as, “Find whole number factor pairs in the range 1–100.” “Identify a multiple of a given whole number in the range 1–100.” “Multiply whole numbers or fractions by fractions.” and “Model and evaluate division of unit fractions by nonzero whole numbers.”
	7e) Materials provide guidance to help teachers **identify students** who need prerequisite work to engage successfully in core instruction, on-grade/course-level work.	**Yes**	Materials provide guidance to help teachers identify students who need prerequisite work to engage successfully in core instruction. The Implementation Guide references that Pre-Module assessments are available with Eureka Math Squared Equip to identify and support students’ unfinished learning. The Pre-Assessments “focus on assessing foundational knowledge essential to the content of the upcoming lesson.” The Pre-

			Module Assessment reports provide data to identify student-specific needs. The goal of the pre-assessment is to clearly identify which students need to engage in supporting content before, or during, grade-level instruction for each module.
	7f) Materials provide **targeted, aligned, prerequisite work** for the major work of the grade/course, directly connected to specific lessons and units in the curriculum.	**Yes**	Materials provide targeted, aligned, prerequisite work for the major work of the grade directly connected to specific lessons and units in the curriculum. The materials include four Pre-Module Assessments that target foundational, prerequisite knowledge for the upcoming modules. The Pre-Module Assessments results used along with the Equip User Guide provide specific activities to provide timely remediation for the current module. Teachers are guided to analyze the results after a pre-assessment is administered. Each item in the Pre-Assessment corresponds to at least one Supporting Activity that can be used to meet the needs of students who require prerequisite work. The Equip User Guide provides information for the Supporting Activity that corresponds to each item in the Pre-Module assessment, such as explanations of why the knowledge is foundational to the module, when specifically in the module the knowledge will be needed, and where in the module there is lesson-embedded practice with the foundational knowledge. For example, for Module 2, Item 1 of the Pre-Assessment references lessons that address foundational content, including Grade 4, Module 2, Topic E, Lessons 21

			and 22. In addition, a Supporting Activity is provided that aligns with the foundation content for the Pre-Assessment item. Further in the Guide, materials provide explanations of why the knowledge is foundational to the module, when specifically in the module the knowledge will be needed, and where in the module there is lesson-embedded practice with the foundational knowledge.
	7g) Materials provide **clear guidance and support** for teachers about the structures that allow students to appropriately address unfinished learning using prerequisite work.		See EdReports for more information.

FINAL EVALUATION

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

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

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-negotiable Criteria of Superior Quality[5]	1. Focus on Major Work	**Yes**	Materials devote a large majority of time to the major work of the grade. Materials spend minimal time on content outside of the appropriate grade level. In assessment materials, assessment components do not make students/teachers responsible for any topics before the grade in which they are introduced.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Materials include problems and activities that connect two or more clusters in a domain and/or two or more domains in the grade level where

[5] Must score a "Yes" for all Non-negotiable Criteria to receive a Tier 1 or Tier 2 rating.

			these connections are natural and important.
	3. Rigor and Balance	**Yes**	Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in the standards. Materials are designed so that students attain the fluencies and procedural skills required by the standards. Materials are designed so that students spend sufficient time working with engaging applications. It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately.
	4. Focus and Coherence via Practice Standards	**Yes**	Materials attend to the full meaning of each practice standard. Each practice standard is connected to grade-level content and is meaningfully present throughout the materials. 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. Materials explicitly attend to the specialized language of mathematics. Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.
II: Additional Alignment Criteria and Indicators of Superior Quality[6]	5. Alignment Criteria for Standards for Mathematical Content		See EdReports for more information.
	6. Quality of Assessments		See EdReports for more information.

[6] Must score a "Yes" for all Additional Criteria of Superior Quality to receive a Tier 1 rating.

	7. Additional Indicators of Quality		Materials identify prerequisite skills and concepts for the major work of the grade when applicable. Materials provide guidance to help teachers identify students who need prerequisite work to engage successfully in core instruction. Materials provide targeted, aligned, prerequisite work for the major work of the grade directly connected to specific lessons and units in the curriculum.
FINAL DECISION FOR THIS MATERIAL: **Tier 1, Exemplifies quality**			

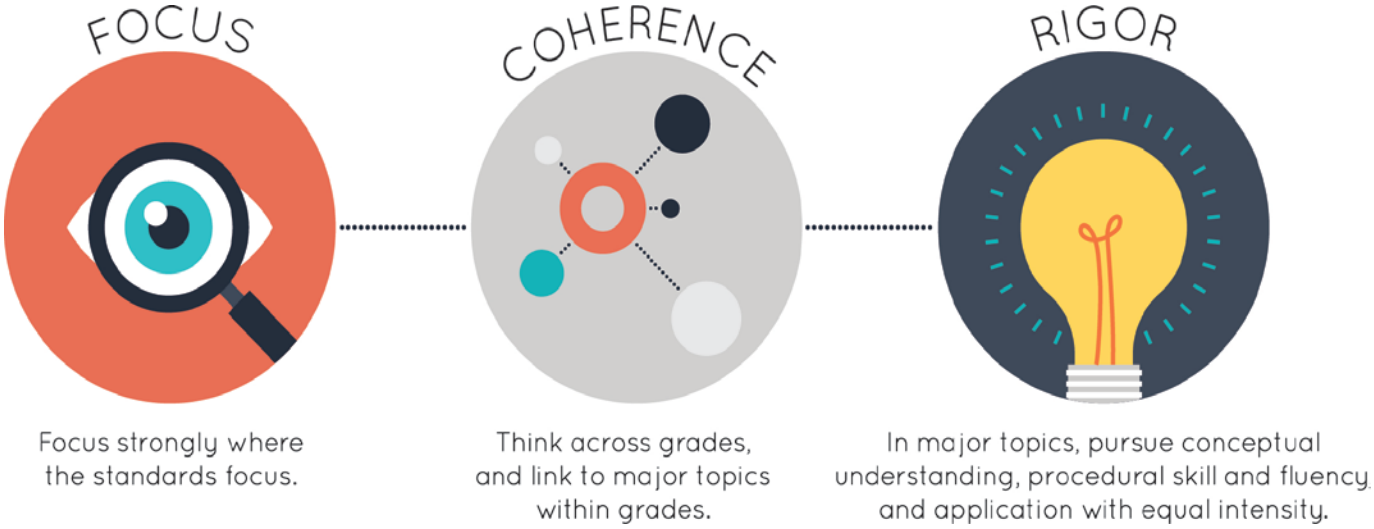
DEPARTMENT of EDUCATION
Louisiana Believes

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

FULL CURRICULUM
Instructional Materials

Qualified for Abbreviated Review[1]

Strong mathematics instruction contains the following elements:



Title: **Eureka Math[2]**

Grade/Course: **7**

Publisher: **Great Minds PBC**

Copyright: **2021**

Overall Rating: **Tier 1, Exemplifies quality**

Tier 1, Tier 2, Tier 3 Elements of this review:

STRONG	WEAK
1. Focus on Major Work (Non-negotiable)	
2. Consistent, Coherent Content (Non-negotiable)	
3. Rigor and Balance (Non-negotiable)	
4. Focus and Coherence via Practice Standards (Non-negotiable)	
5. Alignment Criteria for Standards for Mathematical Content	
6. Quality of Assessments	
7. Indicators of Quality	

[1] Abbreviated Reviews are conducted in K-12 ELA and K-12 Math for submissions that **Meet Expectations** for Gateways 1 and Gateway 2 through EdReports. Reviewers considered these reports as they reviewed materials for alignment to Louisiana state standards and quality Non-negotiable indicators. See the full EdReports review at https://www.edreports.org/reports/overview/eureka-math2-2021.

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

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

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

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

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Section I: Non-negotiable Criteria of Superior Quality: Materials must meet Non-negotiable Criteria 1 and 2 for the review to continue to Non-negotiable Criteria 3 and 4. Materials must meet all of the Non-negotiable Criteria 1-4 in order for the review to continue to Section II.			
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 devote the **majority** of class time to the major work of each grade/course.	**Yes**	Materials devote a larger majority of time to the major work of the grade. Of the 137 instructional lessons, 69% of the lessons are spent on major work of the grade. Specifically, 58% of the lessons focus on major standards alone, 11% of the lessons focus on a combination of major standards and supporting/additional standards, and 31% of the lessons are spent on supporting or additional standards.
	Required **1b)** Instructional materials, including assessments, spend minimal time on content outside of the appropriate grade/course **during core math instruction**. Content beyond grade/course-level should be clearly labeled as optional.	**Yes**	Materials spend minimal time on content outside of the appropriate grade level. In assessment materials, assessment components do not make students/teachers responsible for any topics before they are introduced. All lessons across the topics are related to grade-level work and aligned to the Louisiana State Standards for Mathematics (LSSM) for Grade 7. Optional lessons are clearly labeled in the Teach guides and Year at a Glance document in the teacher's digital resources. For example, Module 4, Lesson 19, Surface Area of Cylinders is labeled as optional. In addition, the materials include a Louisiana Teacher Alignment Guide that provides modifications to lessons, lesson components, and assessment items to

[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%.

			ensure full alignment to the Louisiana Student Standards for Mathematics (LSSM). The guide notes which lessons to omit and includes additional lessons to meet the full intent of the standards. In addition, guidance is provided to omit certain Achievement Descriptors and assessment items that do not align with the Grade 7 LSSM. For example, Module 3, Lessons 18 and 19 should be omitted according to the Alignment Guide. The guide includes additional lessons, such as using the new Lesson 6.1 after Lesson 6 to align with LSSM 7.EE.A.1 and new Lesson 10.1 - 10.3 to align with LSSM 7.SP.B.3. For the Benchmark Assessment 3, Session1, guidance suggests replacing item 6 with new Item 6.1 and using the modified scoring guide information. All other lessons align to the Grade 7 LSSM. For example, in Module 3, Lesson 4, students generate equivalent expressions by using properties of operations to add and subtract expressions (LSSM 7.EE.A.1, 7.EE.A.2). The Fluency portion of the lesson activates prior knowledge of combining like terms to prepare for adding expressions. Students learn several ways to write equivalent expressions in the Learn portion of the lesson. Students analyze work from other students to find a preferred method to write an equivalent expression. The Exit Ticket assesses the students' knowledge by requiring them to use the distributive property to write equivalent expressions.

Non-negotiable **2. CONSISTENT, COHERENT CONTENT** Each course's instructional materials are coherent and consistent with the content in the Standards. ☒ Yes ☐ No	**Required** **2a)** Materials connect **supporting content to major content** in meaningful ways so that focus and coherence are enhanced throughout the year.	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Major work is developed before lessons that address supporting standards. When supporting standards are addressed, the lessons reinforce the major work of the grade by connecting back to major standards. Module 6 addresses all of the supporting content of the grade and reinforces major work found in the Number System (NS) domain. For example, adding, subtracting, multiplying, and dividing rational numbers is developed across Module 2 (LSSM 7.NS.A.1, 7.NS.A.3). Students apply these skills and concepts in Module 6 which addresses the Statistics and Probability domain. For example, in Module 6, Lesson 3, students determine the sample space for chance experiments. For 2c of Recap 3, students determine how many times they expect the given person to pull a blue cube during a chance experiment of 60 trials when given that out of 30 pulls from a bag of 10 cubes, 3 blue and 27 red cubes were pulled, connecting supporting LSSM 7.SP.C.6 to major LSSM 7.NS.A.2a. During Module 6, Lesson 15, students observe that increasing a sample size decreases the sampling variability of the sample mean, connecting supporting LSSM 7.SP.A.2 to major LSSM 7.NS.A.1d and 7.NS.A.2c. During Recap 15, students select a random sample of 10, record their values, find the mean of the sample, make a new sample of 20, find the sample

			mean, and compare the two means. Then, students explain which they think is closer to the population mean and why.
	Required **2b)** Materials include problems and activities that serve to connect two or more **clusters in a domain**, or two or more **domains in a grade/course**, in cases where these connections are natural and important.	**Yes**	Materials include problems and activities that connect two or more clusters in a domain and/or two or more domains in the grade level where these connections are natural and important. Various lessons throughout the materials include standards from multiple clusters and/or domains. Module 5, Lesson 14 connects the Ratios and Proportional Relationships (RP), Expressions and Equations (EE), and Geometry (G) domains. During the lesson students apply scale factor expressed as a percent, a percent decrease, or a percent increase. Students use a simulation of a copy machine to attempt to enlarge a picture of a panda by using different print functions one at a time. Students compare the dimensions of the copied panda to the original. Print A uses scale factor, B uses percent increase and C uses percent decrease. During the Learn portion of the lesson, students use percentages to construct scale drawings. (LSSM 7.RP, 7.EE.A.2, 7.G.A.1). Module 3, Lesson 9 combines clusters A (Use properties of operations to generate equivalent expressions) and B (Solve real-life and mathematical problems using numerical and algebraic expressions and equations) of the Expressions and Equations (EE) domain. During the lesson, students identify and describe angle relationships given in diagrams and write and solve two-step equations that use

			angle relationships to find unknown angle measures. For example, in Problem 1 of Launch, students write equations for angle relationships and draw the angle diagram. Throughout the Learn section, students solve for unknown angles by writing and solving equations using what they know about angle relationships. For each solution, students write substitutes for the unknown and check their solutions (LSSM 7.EE.A.2, 7.EE.B.3).
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 featuring high-quality conceptual problems and discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in the standards. Throughout each of the modules, the materials provide activities and discussion prompts to build conceptual understanding. At the end of the lessons, students demonstrate an understanding of the concepts presented in the lesson. The materials align with the rigor expectations specified in the standards. Students develop the concepts by using visual models, multiple representations, and manipulatives to build conceptual understanding. In Module 2, students develop conceptual understanding within the Number System (NS) domain. Lessons 1-12 focus on LSSM 7.NS.A.1, while Lessons 13-24 focus on LSSM 7.NS.A.2. Lessons 25 and 26 are devoted to LSSM 7.NS.A.3. Throughout the module, a number line is used to help students conceptualize the mathematical procedures involved. For example, Lesson 1, Learn, Problems 1-4 provide students with a numerical description of a real-

			world increase or decrease. Students determine an opposite action and what numerical values to give opposite actions, and represent opposite actions on a number line and with an expression (LSSM 7.NS.A.1a). In Lesson 2, students add integers by using a number line to represent addition expressions (LSSM 7.NS.A.1b). Students use the number line to predict whether the sum will be positive or negative. In Lesson 8, students answer questions such as, “What does -5 represent?” “What does -3 represent?” “Why is -3 being subtracted from -5?” “Is the answer less than or greater than -5?” and “Is taking away -3 the same thing as adding 3?” (LSSM 7.NS.A.1b). These questions help students understand the meaning of the numbers and what is happening to them. Module 4, Lessons 10-15 focus on LSSM 7.G.B.4. In Lesson 10, Launch, students measure the circle that is provided to find the distance around it in centimeters. Students consider how accurate their measurements are and then determine a more accurate way. For Problem 3, students measure the diameter and distance around the circle of round objects found in the classroom. They find the ratio of the distance around the circle to the diameter. Students find that their answers are all 3 and a fractional part. Through this and similar exercises, students develop an understanding of pi.
	Required **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students **attain the**	**Yes**	Materials are designed so that students attain the fluencies and procedural skills required by the standards. Procedural

	fluencies and procedural skills required by the content 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.		skills and fluencies are acquired through a progression of learning over time and throughout the course. Each lesson within the materials begins with a 5-7 minute fluency activity. The fluency assignment for each lesson focuses on a skill needed to complete the lesson. In some lessons, students develop procedural skill and fluency by solving problems. Module 1, Lessons 1-3 align to LSSM 7.RP.A.1. 7.RP.A.2a, and 7.RP.A.2c. In Lesson 3, students divide fractions in the Fluency activity. During Launch, students explore ratios of fractional values. Students then proceed to Learn where they have to determine if a given table of values represents a proportional relationship. At the end of Learn, students fill in tables representing proportional relationships. Module 2, Lesson 4 focuses on LSSM 7.NS.A.1d. During this lesson, students use what they know about adding integers to solve KAKOOMA puzzles. In the puzzles, students add sets of two integers of five to find which one is the sum of two of the others. In order to complete the puzzles, students must be able to fluently add integers correctly. In Module 4, Lesson 18, students calculate the surface area of right prisms (LSSM 7.G.A.6). The lesson begins with the students fluently determining the area of regular polygons to activate prior knowledge. In the Learn portion of the lesson, the teacher guides the students to fluently write equations that will help them find the area of lateral faces which leads to finding the surface area. By the

			end of the Learn portion of the lesson, students fluently write equations to find the surface area and find the surface area of polygons.
	Required **3c)** ***Attention to Applications:*** Materials are designed so that teachers and students spend sufficient time working with **engaging applications**, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/course, afford opportunities for practice, and engage students in problem solving. The problems attend thoroughly to those places in the content standards where expectations for multi-step and real-world problems are explicit.	**Yes**	Materials are designed so that students spend sufficient time working with engaging applications. The materials include engaging real-world problems that require students to show reasoning and justification. The materials provide practice with single- and multi-step contextual problems that develop the mathematics for the grade and engage students in problem solving. The progression of the modules includes opportunities within the lessons to apply conceptual understanding and procedural skills within the context of real-world problems. Students answer questions in pairs, small groups, and whole groups where they justify and explain their reasoning. For example, in Module 1 Lesson 7, students engage in an open-ended modeling exploration by modeling a situation using a proportional relationship to solve a problem (LSSM 7.RP.A.3). Students watch a video and answer the question, “How long does it take the person to cross the finish line?” Students work in groups and apply proportional reasoning to solve the problem. Students then present their strategies and solutions to the class. Throughout the lesson, students apply conceptual understanding of proportional relationships as they gather data, formulate strategies, estimate solutions, and check for

			reasonableness. In Module 5, Lesson 1, Learn, Problem 1, students observe two cube figures with the cross section shown in each. Students sketch the cross sections of each and label appropriately the side lengths (LSSM 7.G.A.1). Students then determine if each is a scale drawing of the other and provide an explanation of how they know. For Problem 5, students observe a right triangular prism with a cross-section formed from a plane perpendicular to the base and parallel to one of its faces. Students draw the cross section and determine if it is a scale drawing of the base and explain why or why not. In Module 6, Lesson 9, students compare simulation results to theoretical probability (LSSM 7.SP.C.8c). For Problem 2, students design and conduct a simulation to estimate the theoretical probability given that a ball player makes 75% of her foul shots. Students determine how likely it is that she will make at least 5 of her next 6 foul shots.
	Required **3d)** ***Balance:*** The three aspects of **rigor** are not always treated together and are not always treated separately.	**Yes**	It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately. The materials reflect the balance of rigor in the standards. The structure of the materials helps students develop the concepts and skills necessary to build and apply math knowledge. Some lessons include two or three aspects of rigor, while other lessons include only one of the aspects of rigor. Module 4 is devoted to the Geometry (G) domain. Lessons 1-9 are aligned to LSSM 7.G.A.2. In

			Lesson 1, Fluency, students measure given angles with a protractor to prepare for constructing angles. During Launch, students freehand a copy of an intricate mandala drawing. During Learn, students sketch figures. Students consider the accuracy of their sketches and determine what tools would have made them more accurate. Students then select their tools and draw/construct the figures. Students develop the conceptual understanding needed to complete drawings of triangles in upcoming lessons. During Lesson 2, students sort and practice drawing quadrilaterals with given measurements and/or angles. In Lesson 3, students investigate whether a triangle can be formed for specific side lengths through the first eight problems. Students develop a conceptual understanding of the points on the triangle and the side lengths they form while answering questions. Students then practice this understanding in determining whether three given lengths can make a triangle. Module 3, Lesson 19 attends to all components of rigor. Students fluently graph the solution sets of inequalities. Students build conceptual understanding of solving inequalities by testing numbers to determine the region that represents the solution set. They also determine boundaries for the solution set. Then they apply their conceptual understanding to write and solve an inequality that represents a situation (LSSM 8.EE.B.4b).

Non-negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Aligned materials make meaningful and purposeful connections that promote focus and coherence by connecting practice standards with content that is emphasized in the Standards. Materials address the practice standards in a way to enrich and strengthen the focus of the content standards instead of detracting from them. ☒ Yes ☐ No	**Required** **4a)** Materials attend to the **full meaning of the practice standards**. Each practice standard is connected to grade/course-level content in a meaningful way and is present throughout the year in assignments, activities, and/or problems.	**Yes**	Materials attend to the full meaning of each practice standard. Each practice standard is connected to grade-level content and is meaningfully present throughout the materials. The materials support students' habits of mind based on the mathematical practices while also building conceptual understanding, developing fluency, and applying understanding. Margin notes in the teacher materials provide cues and connections to the work of the students and the Standards for Mathematical Practice. Each lesson in the modules has a section titled, "Promoting the Standards for Mathematical Practice," which identifies the mathematical practice standards present in the lesson. This section also provides context of where Grade 7 students should be in the progression of the mathematical practices and questions that connect the practice standard to the content standard so that the practice standard is taught in collaboration. In Module 1, Lesson 10 students apply proportional reasoning as they solve problems (LSSM 7.RP.A.2c, 7.RP.A.3). In Problem 1, students reason abstractly and quantitatively (MP.2) as they decontextualize a proportional relationship to write an equation to solve for unknown quantities. Students then bring meaning to the quantity by contextualizing the solution. In Module 2 Lesson 15, students extend their knowledge of multiplying integers to multiply rational numbers (LSSM

			7.NS.A.2a, 7.NS.A.2c). Students look for and make use of structure (MP.7) as they decompose expressions and make equivalent expressions, making them easier to evaluate. In Module 3, Lesson 22, students solve problems involving inequalities (LSSM 7.EE.B.4, 7.EE.B.4b). During Problem 9, students attend to precision (MP.6) as students determine what the graph means in context and discuss the details that are important when determining the solution to the situation. In Module 5, Lesson 11, students solve percent problems in a real-world context that involves percent decrease (LSSM 7.RP.A.3, 7.EE.A.2). Students reason abstractly and quantitatively as they contextualize percent decrease in a situation, check for reasonableness, and make inferences about the situation.
	Required **4b)** Materials provide sufficient opportunities for students to **construct viable arguments and critique the arguments of others** concerning key grade/course-level mathematics that is detailed in the content standards (cf. MP.3). Materials engage students in problem solving as a form of argument, attending thoroughly to places in the standards that explicitly set expectations for multi-step problems.	**Yes**	Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics detailed in the content standards. The lessons are structured with opportunities for students to engage in mathematical reasoning through discussion questions and prompts. The materials provide opportunities for students to form viable arguments and critique the arguments of others throughout the lessons. Lessons also include several routines designed to promote discourse. For example, students determine a misconception in sample work and then construct viable arguments to correct the solution path or solution.

			The last lesson of each module provides students with the opportunity to apply all of the newly developed skills and concepts with group members on a collaborative task as they conduct an error analysis, critique the work of others, and/or justify their thinking. Similar opportunities are also provided throughout the materials. In Module 1 Lesson 7, students draw a scale drawing of another scale drawing by using a scale factor. Students make conjectures by predicting that the scale factor will take a figure to another figure by multiplying the two scale factors. In Module 2, Lesson 14, students construct viable arguments in Problems 6-10. After students evaluate the expressions, they look for any patterns that emerge. The teacher asks students when they think these patterns work and whether they can find a situation which they do not work. During this activity, students create a conjecture by using the properties of operations to complete the proof. Module 5, Lesson 21 includes a gallery walk. During the activity, students determine monthly expenses and a profit for their own Pet Store. When students complete the assignment, they post their work for others to provide feedback. Students complete the gallery walk by reviewing whether the prices of goods and services are reasonable, whether the work is precise and complete, and whether it is clear how the profit was calculated and if it is a reasonable amount. In doing so, students have the opportunity to provide

			feedback to one another about each other's work as well as their own.
	Required **4c)** Materials explicitly attend to the **specialized language** of mathematics.	**Yes**	Materials explicitly attend to the specialized language of mathematics. The materials use and encourage the use of accurate mathematical terminology as appropriate for the grade level. The Terminology Resource identifies the specialized language of mathematics that is used throughout a module. The resource lists New and Familiar terminology with definitions and descriptions from the module. Items in the New category are discipline-specific words that are introduced to students within the module. These items include the definition, description, or illustration as it is presented to students. Language Support margin notes embedded in the lessons provide guidance to teachers as they support students with the specialized language of mathematics. Each Module Overview and Module Assessment Description addresses the proper terminology for students to use as well as definitions for key terms. The sample dialogue in each lesson includes the terminology teachers should expect from their students when they answer questions or share their thinking. In Module 4, Lesson 14, the Language Support box reviews terms previously learned while pointing them out on a rectangular prism, including prism, right rectangular prism, base, height, vertex, vertices, net, and surface area. Guidance suggests using a similar box that has been

			cut along certain edges to use as a net. In Module 5, Lesson 6, students apply percents in the real-world context of commission. At the beginning of the lesson, students are introduced to the vocabulary word commission. They discuss a real-world situation about commission to understand the term. The materials include several teacher-prompted questions to ensure students understand all parts of the term commission such as: "Does it mean all of his sales?" "What does it mean to earn money plus commission?" and "What additional information would be helpful if choosing a job based on commission?" In Module 6, Lesson 1, Problem 7 provides sample student responses that include expected terminology, such as "An event is unlikely when it might happen, but it probably will not happen. The event is not impossible, but less likely to occur than not occur. For unlikely events, the probability is greater than 0 and less than ½. We saw an unlikely event when using spinner C, which had a small green region." Teachers help students connect the new term probability to the instructions given previously to help them when wording their responses.
	4d) There are teacher-directed materials that **explain the role of the practice standards** in the classroom and in students' mathematical development.	**Yes**	Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. The materials provide a full explanation of the purpose and intent of the practice standards with in-lesson connections and context for instruction. Each lesson

			contains a section entitled “Promoting the Standards for Mathematical Practice” that links a specific practice standard to the content of the lesson. The section provides the context of the progression of the standard in the current grade level and in future learning. It provides a specific reference of the lesson activity that implements the practice standard. At the conclusion of each Module, when reviewing achievement descriptors and standards, mathematical practice standards are listed for each module. Within the Implementation Guide, the mathematical practices are explained and highlighted in the margin notes as they appear in specific lessons. Additionally, in the Implementation Guide, the grade-level standards and practice standards are listed for educators as they are presented in all modules. In the section highlighting Lesson Facilitation, the guide describes effective delivery as “delivery that fosters student ownership and belonging. This curriculum supports this aspect by naturally presenting opportunities for students to practice the mathematical practice standards as they arise within the lessons.” For example, in Module 1, Lesson 8, the Promoting the Standards for Mathematical Practice states, “When students identify the constant of proportionality in tables, graphs, equations, and situations, they are making use of structure.” Questions are provided to promote MP.7 such as “How can you use what you know about ration tables to

			help you determine the constant of proportionality?" In Module 3, Lesson 16, Problem 1, questions are provided to promote MP.2 and include asking how the student's expression represents the total, how the calculations represent the total, and do their answers make sense.
Section II: Additional Alignment Criteria and Indicators of Superior Quality			
5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards. ☐ Yes ☐ No	**Required** **5a)** Materials provide all students **extensive work** with grade/course-level problems.		See EdReports for more information.
	Required **5b)** Materials **relate grade/course-level concepts explicitly to prior knowledge** from earlier grades and courses. The materials are designed so that prior knowledge is extended to accommodate the new knowledge, building to core instruction, on grade/course-level work. Lessons are appropriately **structured and scaffolded** to support student mastery.		
	Required **5c)** There is **variety** in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade/course-appropriate way, arguments and explanations, diagrams, mathematical models, etc.		
	5d) Support for **English Language Learners and other special populations** is provided. The language in which problems are posed is not an obstacle to understanding the content, and if it is, additional supports (suggestions for modifications, "vocabulary to preview", etc.,) are included.		
6. QUALITY OF ASSESSMENTS: Materials offer assessment opportunities that genuinely measure progress and elicit direct, observable evidence of the degree	**Required** **6a)** Multiple **assessment opportunities** are embedded into content materials and measure student mastery of standards that reflect the balance of the standards as presented in materials.		

to which students can independently demonstrate the assessed grade-specific Louisiana Student Standards for Mathematics. ☐ Yes ☐ No	**Required** **6b)** Assessment items include a **combination of tasks** that require students to demonstrate conceptual understanding, demonstrate procedural skill and fluency, and apply mathematical reasoning and modeling in real world context. Assessment items require students to produce answers and solutions, arguments, explanations, and models, in a grade/course-appropriate way.		
	6c) Scoring guidelines and rubrics align to standards, incorporate criteria that are specific, observable, and measurable, and provide sufficient guidance for interpreting student performance, misconceptions, and targeted support to engage in core instruction.		
	6d) Materials provide 2-3 **comprehensive assessments** (interims/benchmarks) that measure student learning up to the point of administration.		
7. ADDITIONAL INDICATORS OF QUALITY: Materials are well organized and provide teacher guidance for units and lessons.	**Required** **7a)** The content can be **reasonably completed** within a regular school year and the pacing of content allows for maximum student understanding. The materials provide guidance about the amount of time a task might reasonably take.		
Materials provide timely supports to target specific skills/concepts to address students' unfinished learning in order to access grade-level work. ☐ Yes ☐ No	**Required** **7b)** The materials are **easy to use and well organized** for students and teachers. Teacher editions are concise and easy to manage with clear connections between teacher resources. Guidance is provided for lesson planning and instructional delivery, lesson flow, questions to help prompt student thinking, and expected student outcomes.		
	Required **7c)** Materials include unit and lesson **study tools for teachers**, including, but not limited to, an explanation of the mathematics of each unit and mathematical point of each lesson as it relates to the organizing concepts of		

	the unit and discussion on student ways of thinking and anticipating a variety of student responses.		
	7d) Materials **identify prerequisite skills and concepts** for the major work of the grade/course, connected to the current on-grade/course-level work.	**Yes**	Materials identify prerequisite skills and concepts for the major work of the grade/course. Before a module that addresses the major work of the grade, the materials identify prerequisite skills needed to access grade 7 content. In the Module Overview, Before This Modules, provide prerequisite skills from previous grades or earlier in the current grade students need to be successful. In addition, the Pre-Module Assessment Overview lists essential foundational knowledge needed to access current grade-level content. For example, the Module 3 Overview describes that prerequisite skills are found in Grade 6, Module 4. It then explains that students applied properties of operations to solve one-step equations and that learning will be extended to include negative rational numbers. The Equip Module 1: Ratios and Proportional Relationships Overview identifies essential foundational knowledge needed to access the content within Module 1 such as, “Write and explain ratios that describe relationships between two quantities.” “Write and explain the unit rate that describes a relationship between two quantities.” “Solve real-world problems by using unit rates.” and “Represent ratio relationships by using tables and the coordinate plane.”
	7e) Materials provide guidance to help teachers **identify students** who need prerequisite work to engage	**Yes**	Materials provide guidance to help teachers identify students who need prerequisite work to engage successfully

	successfully in core instruction, on-grade/course-level work.		in core instruction. The Implementation Guide references that Pre-Module assessments are available with Eureka Math Squared Equip to identify and support students' unfinished learning. The Pre-Assessments "focus on assessing foundational knowledge essential to the content of the upcoming lesson." The Pre-Module Assessment reports provide data to identify student-specific needs. The goal of the pre-assessment is to clearly identify which students need to engage in supporting content before, or during, grade-level instruction for each module.
	7f) Materials provide **targeted, aligned, prerequisite work** for the major work of the grade/course, directly connected to specific lessons and units in the curriculum.	**Yes**	Materials provide targeted, aligned, prerequisite work for the major work of the grade directly connected to specific lessons and units in the curriculum. The materials include four Pre-Module Assessments that target foundational, prerequisite knowledge for the upcoming modules. The Pre-Module Assessments results used along with the Equip User Guide provide specific activities to provide timely remediation for the current module. Teachers are guided to analyze the results after a pre-assessment is administered. Each item in the Pre-Assessment corresponds to at least one Supporting Activity that can be used to meet the needs of students who require prerequisite work. The Equip User Guide provides information for the Supporting Activity that corresponds to each item in the Pre-Module assessment, such as explanations of why the knowledge is foundational to the module, when

			specifically in the module the knowledge will be needed, and where in the module there is lesson-embedded practice with the foundational knowledge. For example, for Module 1, Item 3 of the Pre-Assessment references lessons that address foundational content, including Grade 6, Module 1, Topic D, Lessons 16-21. In addition, a Supporting Activity is provided that aligns with the foundation content for the Pre-Assessment item. Further in the Guide, materials provide explanations of why the knowledge is foundational to the module, when specifically in the module the knowledge will be needed, and where in the module there is lesson-embedded practice with the foundational knowledge.
	7g) Materials provide **clear guidance and support** for teachers about the structures that allow students to appropriately address unfinished learning using prerequisite work.		See EdReports for more information.

FINAL EVALUATION

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

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

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-negotiable Criteria of Superior Quality[5]	1. Focus on Major Work	**Yes**	Materials devote a large majority of time to the major work of the grade. Materials spend minimal time on content outside of the appropriate grade level. In assessment materials, assessment components do not make students/teachers responsible for

[5] Must score a "Yes" for all Non-negotiable Criteria to receive a Tier 1 or Tier 2 rating.

			any topics before the grade in which they are introduced.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Materials include problems and activities that connect two or more clusters in a domain and/or two or more domains in the grade level where these connections are natural and important.
	3. Rigor and Balance	**Yes**	Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in the standards. Materials are designed so that students attain the fluencies and procedural skills required by the standards. Materials are designed so that students spend sufficient time working with engaging applications. It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately.
	4. Focus and Coherence via Practice Standards	**Yes**	Materials attend to the full meaning of each practice standard. Each practice standard is connected to grade-level content and is meaningfully present throughout the materials. 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. Materials explicitly attend to the specialized language of mathematics. Materials include teacher-directed

			materials that explain the role of the practice standards in the classroom and in students' mathematical development.
II: Additional Alignment Criteria and Indicators of Superior Quality[6]	5. Alignment Criteria for Standards for Mathematical Content		See EdReports for more information.
	6. Quality of Assessments		See EdReports for more information.
	7. Additional Indicators of Quality		Materials identify prerequisite skills and concepts for the major work of the grade when applicable. Materials provide guidance to help teachers identify students who need prerequisite work to engage successfully in core instruction. Materials provide targeted, aligned, prerequisite work for the major work of the grade directly connected to specific lessons and units in the curriculum.
FINAL DECISION FOR THIS MATERIAL: **Tier 1, Exemplifies quality**			

[6] Must score a "Yes" for all Additional Criteria of Superior Quality to receive a Tier 1 rating.

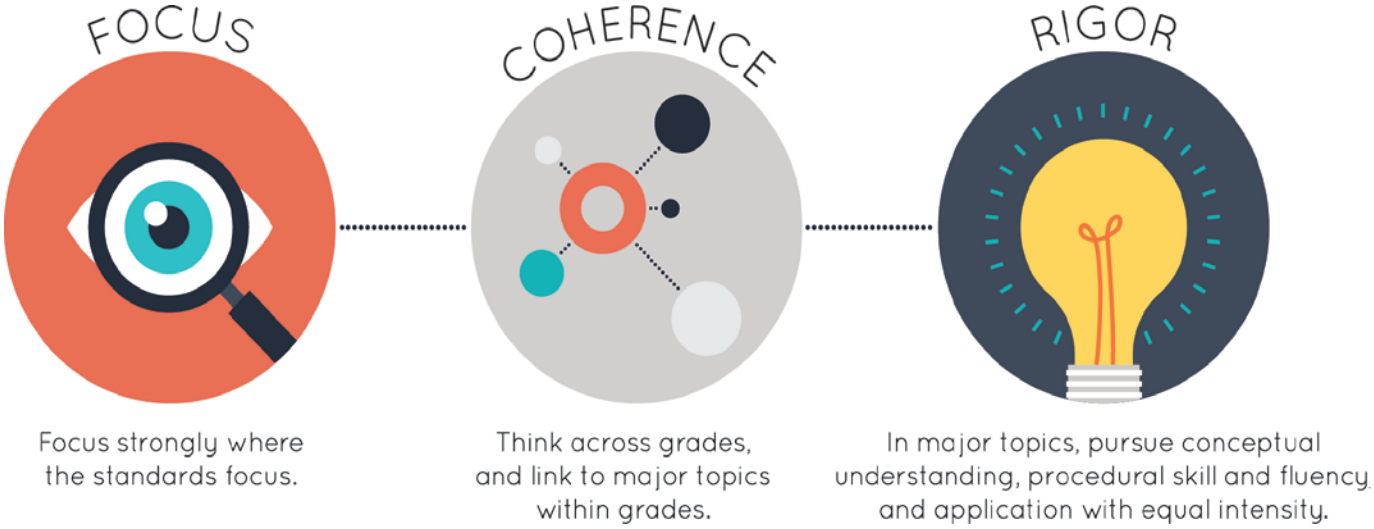
DEPARTMENT of EDUCATION
Louisiana Believes

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

FULL CURRICULUM
Instructional Materials

Qualified for Abbreviated Review[1]

Strong mathematics instruction contains the following elements:



Title: **Eureka Math[2]**

Grade/Course: **8**

Publisher: **Great Minds PBC**

Copyright: **2021**

Overall Rating: **Tier 1, Exemplifies quality**

Tier 1, Tier 2, Tier 3 Elements of this review:

STRONG	WEAK
1. Focus on Major Work (Non-negotiable)	
2. Consistent, Coherent Content (Non-negotiable)	
3. Rigor and Balance (Non-negotiable)	
4. Focus and Coherence via Practice Standards (Non-negotiable)	
5. Alignment Criteria for Standards for Mathematical Content	
6. Quality of Assessments	
7. Indicators of Quality	

[1] Abbreviated Reviews are conducted in K-12 ELA and K-12 Math for submissions that **Meet Expectations** for Gateways 1 and Gateway 2 through EdReports. Reviewers considered these reports as they reviewed materials for alignment to Louisiana state standards and quality Non-negotiable indicators. See the full EdReports review at https://www.edreports.org/reports/overview/eureka-math2-2021.

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

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

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

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

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Section I: Non-negotiable Criteria of Superior Quality: Materials must meet Non-negotiable Criteria 1 and 2 for the review to continue to Non-negotiable Criteria 3 and 4. Materials must meet all of the Non-negotiable Criteria 1-4 in order for the review to continue to Section II.			
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 devote the **majority** of class time to the major work of each grade/course.	**Yes**	Materials devote a larger majority of time to the major work of the grade. Of the 129 lessons, 86% of instructional lessons are spent on major work of the grade. Specifically, 81% of lessons are spent on major standards, 5% of lessons are spent on a combination of major standards and supporting/additional standards, and 14% of lessons are spent on supporting or additional standards.
	Required **1b)** Instructional materials, including assessments, spend minimal time on content outside of the appropriate grade/course **during core math instruction**. Content beyond grade/course-level should be clearly labeled as optional.	**Yes**	Materials spend minimal time on content outside of the appropriate grade level. In assessment materials, assessment components do not make students/teachers responsible for any topics before they are introduced. All lessons across the topics are related to grade-level work and aligned to the Louisiana State Standards for Mathematics (LSSM) for Grade 8. Optional lessons are clearly labeled in the Teach books and Year at a Glance document in the teacher's digital resources. In addition, the materials include a Louisiana Teacher Alignment Guide that provides modifications to lessons, lesson components, and assessment items to ensure full alignment to the Louisiana Student Standards for Mathematics

[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%.

			(LSSM). The guide notes which lessons to omit and includes additional lessons to meet the full intent of the standards. In addition, guidance is provided to omit certain Achievement Descriptors and assessment items that do not align with the Grade 8 LSSM. All other lessons and assessment items align to Grade 8 LSSM. For example, in Module 2, the Lesson 11 Exit Ticket has been replaced with a new Lesson 11 Exit Ticket aligning to LSSM 8.G.A.2. Lessons that are optional have titles that are written in blue in the Scope and Sequence for the year provided in the digital materials. Module 1, Lesson 10, Evaluating Numerical Expressions by Using Properties of Exponents and Module 5, Lesson 8, Using Tape Diagrams to Solve Systems of Equations are both listed as optional lessons. In Module 1, Topic A, Lesson 3, the Fluency requires students to "expand each power of 10 to prepare for writing a number in standard and in scientific notation." The fluency review is a prerequisite for the activities in Lesson 3 as students develop the definition of scientific notation and its structure (LSSM 8.EE.A.3).
Non-negotiable **2. CONSISTENT, COHERENT CONTENT** Each course's instructional materials are coherent and consistent with the content in the Standards.	**Required** **2a)** Materials connect **supporting content to major content** in meaningful ways so that focus and coherence are enhanced throughout the year.	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Major work is developed before lessons that address supporting standards. When supporting standards are addressed, the lessons reinforce the major work of the grade by connecting back to major

☒ Yes ☐ No			standards. Supporting content can be found in Modules 1, 4, and 8 where it is taught along with major content. For example, major LSSM 8.EE.A.2 is first developed in Module 1, Lessons 16, 17, and 20 and then reinforced in Module 1, Lesson 22 which also addresses supporting LSSM 8.NS.A.1. In this lesson, Familiar and Not So Familiar Numbers, students determine whether numbers are rational or irrational. Launch begins with students identifying the next digit for repeating and non-repeating decimal numbers. Students engage in a discussion about the definition of rational numbers. The teacher then introduces the term irrational with its definition. Students use a table of numbers for Problem 10 to identify whether the numbers are rational or irrational. Major LSSM 8.F.A.3 is first developed in the beginning of Module 6 and is then reinforced in Lesson 10 which also addresses supporting LSSM 8.F.B.5. In the Launch, students identify graphs as a linear or nonlinear function and describe its features (LSSM 8.F.A.3 and LSSM 8.F.B.5). In the Learn activity, students interpret the features of the linear and nonlinear graphs. Students use features identified to determine whether the "relationship given by the equation and the graph represents y as a function of x.
	Required **2b)** Materials include problems and activities that serve to connect two or more **clusters in a domain**, or two or more **domains in a grade/course**, in cases where these connections are natural and important.	**Yes**	Materials include problems and activities that connect two or more clusters in a domain and/or two or more domains in the grade level where these connections are natural and important. Various lessons

			throughout the materials include standards from multiple clusters and/or domains. Module 1, Lesson 20, Square Roots makes the natural connection between the Expressions and Equations (EE) and Geometry (G) domains. In the lesson, students solve equations in the form x squared is equal to p and apply the Pythagorean Theorem to determine the unknown length of the hypotenuse of a right triangle (LSSM 8.EE.A.2, 8.G.B.7). Module 3, Lesson 16 connects Clusters A and B of the Geometry (G) domain (LSSM 8.G.A.3, LSSM 8.G.A.5, LSSM 8.G.B.7). In the Launch activity, students match side lengths of a right triangle and determine that similar triangles are a dilation of one another (LSSM 8.G.A.3). In the Learn Activity, Finding Unknown Lengths, students use height-to-base-ratios of similar triangles to determine unknown lengths of right triangles (LSSM 8.G.A.5). In the second Learn Activity, Using the Pythagorean Theorem, students are introduced to the Pythagorean Theorem when sufficient sides are not provided to determine the ratios of the lengths (LSSM 8.G.B.7). Module 6, Lesson 7 connects Clusters A and B of the Functions (F) domain and also connects the Functions (F) and Statistics and Probability (SP) domains. During the lesson, students interpret rate of change and initial value through comparing functions represented in different ways, constructing functions to model linear relationships, and interpreting rates of change and initial

			values (LSSM 8.F.A.2, 8.F.B.4, and 8.SP.A.3).
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 featuring high-quality conceptual problems and discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in the standards. Throughout each of the modules, the materials provide activities and discussion prompts to build conceptual understanding. At the end of the lessons, students demonstrate an understanding of the concepts presented in the lesson. The materials align with the rigor expectations specified in the standards. Students develop the concepts by using visual models, multiple representations, and manipulatives to build conceptual understanding. For example, Module 3, Lessons 12-16 provides students the opportunity to develop conceptual understanding of angle relationships that exist between angle sums and exterior angles sums of triangles and of angles created when parallel lines are cut by a transversal and the angle-angle criterion for similarity of triangles (LSSM 8.G.A.5). Lesson 12 introduces comparing triangles and determining similarity based on students' knowledge of angle relationships and dilations. The angle-angle criterion is introduced as students continue to compare pairs of triangles with two of the angles labeled in each. Lesson 13 allows for student exploration as they look for similar figures within a given piece of artwork. Students practice again with given triangles to finish the lesson. In

			Lesson 14, students practice using similar figures to find unknown side lengths before using properties of similar figures to solve problems in Lesson 15. Module 4, Lessons 16-20 are devoted to the conceptual understanding of major LSSM 8.EE.B.6. Problem 2 of Lesson 16 introduces slope triangles as students choose any two points on the given line on a coordinate plane to form the hypotenuse of a right triangle they are to draw. After drawing the triangles, groups of four students compare their values of height-to-base ratios. Students find that they all have the same value regardless of the height and base of their individual triangles. Through questioning, students label these triangles as similar triangles. Using the fact that all students could have drawn different triangles, the teacher points out that there are infinitely many triangles that can be drawn on this line. The unit rate of the beginning line is equivalent to the height-to-base ratio. In the following lessons, students use this understanding to compare and find slopes of lines with positive and negative slopes. In Module 6, Topic A, Lessons 1-2, students develop a conceptual understanding of a function in terms of input and output (LSSM 8.F.A.1). In the Learn component of Lesson 1, students analyze how time and distance traveled can be used to find the average speed and are introduced informally to the concept of a function. Students recall finding the constant of proportionality from Grade 7

			to determine the average speed. In Lesson 2, students are formally introduced to the definition of a function. In the Learn component of Lesson 2, students describe time and distance in terms of input and output, or independent and dependent variables. Students analyze which tables represent a function based on the distance traveled by a falling fish after a specified number of seconds.
	Required **3b) *Attention to Procedural Skill and Fluency:*** The materials are designed so that students **attain the fluencies and procedural skills** required by the content standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	Materials are designed so that students attain the fluencies and procedural skills required by the standards. Procedural skills and fluencies are acquired through a progression of learning over time and throughout the course. Each lesson within the materials begins with a 5-7 minute fluency activity. The fluency assignment for each lesson focuses on a skill needed to complete the lesson. In some lessons, students develop procedural skill and fluency by solving problems. Module 2, Lessons 7-12 align with LSSM 8.G.2. In Lesson 7, Fluency, students apply rigid motions in preparation for mapping an image back onto the original figure. During Launch, students form opinions about how to use rigid motions to map an image back onto its figure by having students draw a figure, perform a rigid motion, and then share with a partner who then forms an opinion about what rigid motion was performed. During Learn, students recognize and describe how any rigid motion can be undone through three separate activities. In Lesson 8, students create and perform sequences of rigid

			motions. In Lesson 9, students explore through trial and error the sequence of rigid motions performed in given examples. Lessons 11-12 introduce congruence in relation to rigid motion. In Module 2, Lesson 20, students find the length of segments on the coordinate plane using the Pythagorean Theorem (LSSM 8.G.B.8). Students also practice applying the Pythagorean Theorem by determining if a triangle is a right triangle and finding the distance between two points. Students have multiple opportunities to practice fluency with the Pythagorean Theorem. In Module 5, Lesson 6, Fluency, students fluently solve equations in preparation for the lesson on solving systems of linear equations without graphing (LSSM 8.EE.C.8b). During this fluency activity, students solve six one- and two-step equations with one variable. The Learn section begins with students making connections by writing systems of linear equations in two variables as a single linear equation in one variable. Students then use substitution to develop the procedural skills required by the standard. Lesson 7 continues with the practice of substituting to develop fluency.
	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	**Yes**	Materials are designed so that students spend sufficient time working with engaging applications. The materials include engaging real-world problems that require students to show reasoning and justification. The materials provide practice with single- and multi-step contextual problems that develop the

	problem solving. The problems attend thoroughly to those places in the content standards where expectations for multi-step and real-world problems are explicit.		mathematics for the grade and engage students in problem solving. The progression of the modules includes opportunities within the lessons to apply conceptual understanding and procedural skills within the context of real-world problems. Students answer questions in pairs, small groups, and whole groups where they justify and explain their reasoning. For example, in Module 5, Topic C, Lesson 13, students write and solve systems of linear equations (LSSM 8.EE.C.8c). Students analyze real-world situations to write a system of linear equations, followed by solving the system in order to answer. In the Learn component of the lesson, Park Attendance, Task 2 states, “A total of 190 people are going to the amusement park for an end-of-school field trip. The park charges $18 for each adult ticket and $13 for each student ticket. The class president calculates a cost of $2,660 for all adult and student tickets to the park. How many adults and how many students are going to the amusement park?” Once students write the system of linear equations, they solve for one variable in order to determine the other variable. Module 6, Lessons 21-25 are aligned to LSSM 8.G.C.9. The standard requires students to use the formulas for the volumes of cones, cylinders, and spheres in real-world and mathematical problems. After developing and practicing the use of the formulas, students apply these formulas. For example, Problems 3-6 of Lesson 24 are

			labeled Working with the Formula. On Problem 5, students find the approximate volume of a billiard ball with a diameter of 2 1/4 inches using 3.14 as an approximation for pi and rounding to the nearest hundredth.
	Required **3d) *Balance:*** The three aspects of **rigor** are not always treated together and are not always treated separately.	**Yes**	It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately. The materials reflect the balance of rigor in the standards. The structure of the materials help students develop the concepts and skills necessary to build and apply math knowledge. Some lessons include two or three aspects of rigor, while other lessons include only one of the aspects of rigor. Module 1, Lesson 1 integrates conceptual understanding and procedural skill and fluency. The lesson begins with Fluency in which students write numbers by using powers of 10 to prepare for writing large positive numbers as a single digit times a power of 10 in exponential form. During Launch, students observe how very large numbers are written as a power of 10 and very small numbers are written as a fraction with a power of 10 as the denominator. During Learn, students develop conceptual understanding by writing very large approximations in standard form. Students continue developing understanding by writing a number in standard form as expanded and exponential form. Students practice procedural skill and fluency by rounding given numbers to the designated place

			value and then writing it in exponential form (LSSM 8.EE.A.3). Module 4, Lesson 3, Solving Linear Equations with Rational Coefficients focuses on procedural skill and fluency as students write and solve linear equations (LSSM 8.EE.C.7b). For each problem of the lesson, students solve the problem and check their solution. Recap 3 provides more opportunities to practice procedural skill and fluency with fifteen additional problems. Module 5 is introduced by identifying solutions of a system from a graph (LSSM 8.EE.C.8a). In Module 5, Topic B, students utilize their conceptual understanding for determining the solution graphically to solve systems algebraically (LSSM 8.EE.C.8b). In Module 5, Topic B, students develop procedural skills and fluency. Module 5, Topic C, Lesson 13 provides real-world application as students write and solve systems of linear equations using various situations (LSSM 8.EE.C.8c). Aspects are treated together as students can utilize solving systems graphically or algebraically to solve real-world applications in Lesson 13.
Non-negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Aligned materials make meaningful and purposeful connections that promote focus and coherence by connecting practice standards with content that is emphasized in the Standards. Materials address the practice standards in a way to enrich and strengthen the focus of	**Required** **4a)** Materials attend to the **full meaning of the practice standards**. Each practice standard is connected to grade/course-level content in a meaningful way and is present throughout the year in assignments, activities, and/or problems.	**Yes**	Materials attend to the full meaning of each practice standard. Each practice standard is connected to grade-level content and is meaningfully present throughout the materials. The materials support students' habits of mind based on the mathematical practices while also building conceptual understanding, developing fluency, and applying understanding. Margin notes in the teacher materials provide cues and

the content standards instead of detracting from them. ☒ Yes ☐ No			connections to the work of the students and the Standards for Mathematical Practice. Each lesson in the modules has a section titled, “Promoting the Standards for Mathematical Practice,” which identifies the mathematical practice standards present in the lesson. This section also provides context of where Grade 8 students should be in the progression of the mathematical practices and questions that connect the practice standard to the content standard so that the practice standard is taught in collaboration. For example, in Module 1, Topic A, Lesson 4, students attend to precision (MP.6) as they add and subtract numbers written in scientific notation (LSSM 8.EE.A.4). Students rewrite numbers in order to add and subtract in scientific notation. MP.2 is promoted in Module 2, Lesson 21 as students apply the Pythagorean Theorem (LSSM 8.G.B.7). Students answer questions, such as: “What real-world situations are modeled by right triangles” and “What does the problem ask you to do?” prompting students to reason quantitatively and abstractly as they apply the Pythagorean Theorem to solve real-world problems. During Module 3, Lesson 4, students use lined paper to explore dilations (LSSM 8.G.A.3). Students utilize MP.8 as they compare the lengths of different segments and their images under dilations with different scale factors by looking for and expressing regularity in repeated reasoning. Students answer questions

			such as, “What pattern do you notice between the length of the segment and the length of its image?” and “Will this pattern always hold? Why?”
	Required **4b)** Materials provide sufficient opportunities for students to **construct viable arguments and critique the arguments of others** concerning key grade/course-level mathematics that is detailed in the content standards (cf. MP.3). Materials engage students in problem solving as a form of argument, attending thoroughly to places in the standards that explicitly set expectations for multi-step problems.	**Yes**	Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics detailed in the content standards. The lessons are structured with opportunities for students to engage in mathematical reasoning through discussion questions and prompts. The materials provide opportunities for students to form viable arguments and critique the arguments of others throughout the lessons. Lessons also include several routines designed to promote discourse. For example, students determine a misconception in sample work and then construct viable arguments to correct the solution path or solution. The last lesson of each module provides students with the opportunity to apply all of the newly developed skills and concepts with group members on a collaborative task as they conduct an error analysis, critique the work of others, and/or justify their thinking. Similar opportunities are also provided throughout the materials. During the Learn portion of Module 5, Lesson 5, students conduct a Graphing Systems Relay. Students first graph their designated system of linear equations onto the graph and estimate the intersection of the two lines (LSSM 8.EE.C.8b). Next, students pass the work to the next person in their group. Students

			critique the graph and solution given by the previous student. If the work is incorrect, they rework the problem and discuss what they determined was the error. During the Debrief portion of Module 6, Lesson 3, students tell how they determined the numbers that made sense as inputs in the given situations (LSSM 8.G.A.3). This discussion prompts students to engage in mathematical reasoning and justification of their answers. Students critique one another and conduct error analyses, as needed. In Module 6, Topic C, Lesson 13, students create a best fit line based on a scatter plot (LSSM 8.SP.A.2). Once students draw their best fit line, pairs of students turn and talk with another pair of students about questions, making predictions based on the data. The materials prompt students to "use your line to predict the price of a 3000-square-foot house" and "use your line to predict the price of a 1500-square-foot house." Students critique each other's best fit line and discuss their findings.
	Required **4c)** Materials explicitly attend to the **specialized language** of mathematics.	**Yes**	Materials explicitly attend to the specialized language of mathematics. The materials use and encourage the use of accurate mathematical terminology as appropriate for the grade level. The Terminology Resource identifies the specialized language of mathematics that is used throughout a module. The resource lists New and Familiar terminology with definitions and descriptions from the module. Items in the New category are discipline-specific words

			that are introduced to students within the module. These items include the definition, description, or illustration as it is presented to students. Language Support margin notes embedded in the lessons provide guidance to teachers as they support students with the specialized language of mathematics. Each Module Overview and Module Assessment Description addresses the proper terminology for students to use as well as definitions for key terms. The sample dialogue in each lesson includes the terminology teachers should expect from their students when they answer questions or share their thinking. The sample student response for Problem 8 of Module 1 Lesson 11, provides the expectation that students will use the terms absolute value and power of 10. The Terminology section for Module 4 provides teachers with the fifteen new terms students learn in the module including linear relationship and slope triangle. Definitions and lesson numbers are provided for each of the new terms, as well as, and examples are provided when needed. Fourteen familiar terms are listed including equation, expression, and unit rate. In Module 3, Topic C, Lesson 11, students use precise language to describe a sequence of rigid motions to determine whether two figures are similar (LSSM 8.G.A.4). Materials invite one pair of students to share a sequence, followed by a class discussion to determine whether any other pairs of figures can describe a

			different sequence. Students use precise language as they describe the various sequences. In Module 5, Lesson 9, students develop mathematical terminology to classify functions as linear, nonlinear, increasing, and/or decreasing using the graph provided (LSSM 8.F.B.5). In addition, tasks provide students with opportunities to label whether the function, represented by a graph, is: Linear and Increasing, Linear and Decreasing, Nonlinear and Increasing, or Nonlinear and Decreasing. Students use mathematical language when describing the features of the graphs.
	4d) There are teacher-directed materials that **explain the role of the practice standards** in the classroom and in students' mathematical development.	**Yes**	Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. The materials provide a full explanation of the purpose and intent of the practice standards with in-lesson connections and context for instruction. Each lesson contains a section entitled "Promoting the Standards for Mathematical Practice" that links a specific practice standard to the content of the lesson. The section provides the context of the progression of the standard in the current grade level and in future learning. It provides a specific reference of the lesson activity that implements the practice standard. At the conclusion of each Module, when reviewing achievement descriptors and standards, mathematical practice standards are listed for each module. Within the Implementation Guide, the

			mathematical practices are explained and highlighted in the margin notes as they appear in specific lessons. Additionally, in the Implementation Guide, the grade-level standards and practice standards are listed for educators as they are presented in all modules. In the section highlighting Lesson Facilitation, the guide describes effective delivery as “delivery that fosters student ownership and belonging. This curriculum supports this aspect by naturally presenting opportunities for students to practice the mathematical practice standards as they arise within the lessons.” For example, in Module 2, Lesson 3, students apply reflections to the plane and identify basic properties of reflections (LSSM 8.G.A.1a, 8.G.A.1b, 8.G.A.1c). As students repeatedly draw the images of figures to create the reflections, they notice certain patterns emerge. According to the teacher materials, “This work helps students to look for and express regularity in repeated reasoning” (MP.8). Students notice the point and its images are an equal distance from the line of reflection. They recognize that a line containing a point and its image is perpendicular to the line of reflection. In Module 4, Topic A, Lesson 3, students solve equations with rational coefficients (LSSM 8.EE.C.7). Materials promote MP.7 and guide teachers to have students rewrite an equation with integer coefficients to make use of the structure. The teacher also asks questions to promote MP.7, such as “How can what

			you know about the properties of equality help you rewrite an equation without any fractions or decimals?"
Section II: Additional Alignment Criteria and Indicators of Superior Quality			
5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards. ☐ Yes ☐ No	**Required** **5a)** Materials provide all students **extensive work** with grade/course-level problems.		See EdReports for more information.
	Required **5b)** Materials **relate grade/course-level concepts explicitly to prior knowledge** from earlier grades and courses. The materials are designed so that prior knowledge is extended to accommodate the new knowledge, building to core instruction, on grade/course-level work. Lessons are appropriately **structured and scaffolded** to support student mastery.		
	Required **5c)** There is **variety** in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade/course-appropriate way, arguments and explanations, diagrams, mathematical models, etc.		
	5d) Support for **English Language Learners and other special populations** is provided. The language in which problems are posed is not an obstacle to understanding the content, and if it is, additional supports (suggestions for modifications, "vocabulary to preview", etc.,) are included.		
6. QUALITY OF ASSESSMENTS: Materials offer assessment opportunities that genuinely measure progress and elicit direct, observable evidence of the degree to which students can independently demonstrate the assessed grade-specific Louisiana	**Required** **6a)** Multiple **assessment opportunities** are embedded into content materials and measure student mastery of standards that reflect the balance of the standards as presented in materials.		
	Required **6b)** Assessment items include a **combination of tasks** that require students to demonstrate conceptual understanding, demonstrate procedural skill and		

Student Standards for Mathematics. ☐ Yes ☐ No	fluency, and apply mathematical reasoning and modeling in real world context. Assessment items require students to produce answers and solutions, arguments, explanations, and models, in a grade/course-appropriate way.		
	6c) Scoring guidelines and rubrics align to standards, incorporate criteria that are specific, observable, and measurable, and provide sufficient guidance for interpreting student performance, misconceptions, and targeted support to engage in core instruction.		
	6d) Materials provide 2-3 **comprehensive assessments** (interims/benchmarks) that measure student learning up to the point of administration.		
7. ADDITIONAL INDICATORS OF QUALITY: Materials are well organized and provide teacher guidance for units and lessons.	**Required** **7a)** The content can be **reasonably completed** within a regular school year and the pacing of content allows for maximum student understanding. The materials provide guidance about the amount of time a task might reasonably take.		
Materials provide timely supports to target specific skills/concepts to address students' unfinished learning in order to access grade-level work. ☐ Yes ☐ No	**Required** **7b)** The materials are **easy to use and well organized** for students and teachers. Teacher editions are concise and easy to manage with clear connections between teacher resources. Guidance is provided for lesson planning and instructional delivery, lesson flow, questions to help prompt student thinking, and expected student outcomes.		
	Required **7c)** Materials include unit and lesson **study tools for teachers**, including, but not limited to, an explanation of the mathematics of each unit and mathematical point of each lesson as it relates to the organizing concepts of the unit and discussion on student ways of thinking and anticipating a variety of student responses.		
	7d) Materials **identify prerequisite skills and concepts** for the major work of the grade/course, connected to the current on-grade/course-level work.	**Yes**	Materials identify prerequisite skills and concepts for the major work of the grade.

			In the Module Overview, margin notes titled, “Before This Module,” provide prerequisite skills from previous grades or earlier in the current grade students need to be successful. As an additional purchase, the Eureka Math² Equip provides tools that help identify and support students with unfinished learning. As part of Equip, the Pre-Module Assessment Overview lists essential foundational knowledge needed to access current grade-level content. For example, the Equip Module 1: Scientific Notation, Exponents, and Irrational Numbers identifies essential foundational knowledge needed to access the content within Module 1 such as, “Create two comparison statements, given a multiplication equation.” “Explain the effect of multiplying and dividing whole numbers by powers of 10.” “Add and subtract multi-digit whole numbers by using the standard algorithm.” and “Apply properties of operations to add, subtract, multiply, and divide rational numbers.” In Module 1, Topic A, Before this Module states, “Students apply their Grade 5 knowledge of powers of 10 to write and operate with numbers in scientific notation” and “In this module, students extend their understanding of rational numbers from Grade 7 to define irrational numbers and real numbers.” The Module 6 Overview identifies Grade 6, Module 6; Grade 7, Module 4; Grade 7, Module 6; and Grade 8, Module 4 as prerequisite modules to have been completed for

			students to be reading for this module. Specifically from Grade 6, Module 6, students build on their knowledge of univariate data analysis to consider bivariate data analysis.
	7e) Materials provide guidance to help teachers **identify students** who need prerequisite work to engage successfully in core instruction, on-grade/course-level work.	**Yes**	Materials provide guidance to help teachers identify students who need prerequisite work to engage successfully in core instruction. The Implementation Guide references that Pre-Module assessments are available with Eureka Math Squared Equip to identify and support students' unfinished learning. The Pre-Assessments "focus on assessing foundational knowledge essential to the content of the upcoming lesson." The Pre-Module Assessment reports provide data to identify student-specific needs. The goal of the pre-assessment is to clearly identify which students need to engage in supporting content before, or during, grade-level instruction for each module.
	7f) Materials provide **targeted, aligned, prerequisite work** for the major work of the grade/course, directly connected to specific lessons and units in the curriculum.	**Yes**	Materials provide targeted, aligned, prerequisite work for the major work of the grade directly connected to specific lessons and units in the curriculum. The materials include four Pre-Module Assessments that target foundational, prerequisite knowledge for the upcoming modules. The Pre-Module Assessments results used along with the Equip User Guide provide specific activities to provide timely remediation for the current module. Teachers are guided to analyze the results after a pre-assessment is administered. Each item in the Pre-Assessment corresponds to at least one

			Supporting Activity that can be used to meet the needs of students who require prerequisite work. The Equip User Guide provides information for the Supporting Activity that corresponds to each item in the Pre-Module assessment, such as explanations of why the knowledge is foundational to the module, when specifically in the module the knowledge will be needed, and where in the module there is lesson-embedded practice with the foundational knowledge. For Modules 2 and 3, a single Pre-Module Assessment is provided and assesses fourteen prerequisite skills. The Overview in the teacher materials directs the teacher to the specific modules and lessons these skills were taught in the current or previous grades. Item 1 of the Pre-Assessment references lessons that address foundational content, such as Grade 3, Module 5, Topic C, Lesson 16. Further in the guide, materials provide explanations of why the knowledge is foundational to the module, when specifically in the module the knowledge will be needed, and where in the module there is lesson-embedded practice with the foundational knowledge. For each problem that may be missed, teachers are provided a Supporting Activity with an accompanying lesson plan through the digital platform. Activities can be done one-on-one, small group, or whole class as needed. The Supporting Activity for Item 12 states that students “may need support reproducing a scale drawing on a grid.”

			The activity engages students in a scale drawing off a grid and then on a grid. This is to prepare "students to describe the effect of dilations on two-dimensional figures in the plane."
	7g) Materials provide **clear guidance and support** for teachers about the structures that allow students to appropriately address unfinished learning using prerequisite work.		See EdReports for more information.

FINAL EVALUATION

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

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

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-negotiable Criteria of Superior Quality[5]	1. Focus on Major Work	**Yes**	Materials devote a large majority of time to the major work of the grade. Materials spend minimal time on content outside of the appropriate grade level. In assessment materials, assessment components do not make students/teachers responsible for any topics before the grade in which they are introduced.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Materials include problems and activities that connect two or more clusters in a domain and/or two or more domains in the grade level where these connections are natural and important.
	3. Rigor and Balance	**Yes**	Materials develop conceptual understanding of key mathematical concepts, especially where called for

[5] Must score a "Yes" for all Non-negotiable Criteria to receive a Tier 1 or Tier 2 rating.

			explicitly in the standards. Materials are designed so that students attain the fluencies and procedural skills required by the standards. Materials are designed so that students spend sufficient time working with engaging applications. It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately.
	4. Focus and Coherence via Practice Standards	**Yes**	Materials attend to the full meaning of each practice standard. Each practice standard is connected to grade-level content and is meaningfully present throughout the materials. 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. Materials explicitly attend to the specialized language of mathematics. Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.
II: Additional Alignment Criteria and Indicators of Superior Quality[6]	5. Alignment Criteria for Standards for Mathematical Content		See EdReports for more information.
	6. Quality of Assessments		See EdReports for more information.
	7. Additional Indicators of Quality		Materials identify prerequisite skills and concepts for the major work of the grade when applicable. Materials provide guidance to help teachers identify students who need prerequisite work to

[6] Must score a "Yes" for all Additional Criteria of Superior Quality to receive a Tier 1 rating.

			engage successfully in core instruction. Materials provide targeted, aligned, prerequisite work for the major work of the grade directly connected to specific lessons and units in the curriculum.
FINAL DECISION FOR THIS MATERIAL: **Tier 1, Exemplifies quality**			

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

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

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

The 2021-2022 Teacher Leader Advisors are selected from across the state and represent the following parishes and school systems: Acadia, Ascension, Baton Rouge Diocese, Beauregard, Bossier, Calcasieu, Central Community, City of Monroe, Desoto, East Baton Rouge, East Feliciana, Evangeline, Franklin, Iberia, Jefferson, Lafayette, Lafourche, Lincoln, Livingston, Louisiana Tech University, Louisiana Virtual Charter Academy, Orleans, Ouachita, Rapides, Regina Coeli Child Development Center, Richland, Special School District, St. Charles, St. John, St. Landry, St. Martin, St. Mary, St. Tammany, Tangipahoa, Terrebonne, University View Academy, Vermillion, West Baton Rouge, and West Feliciana. 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.