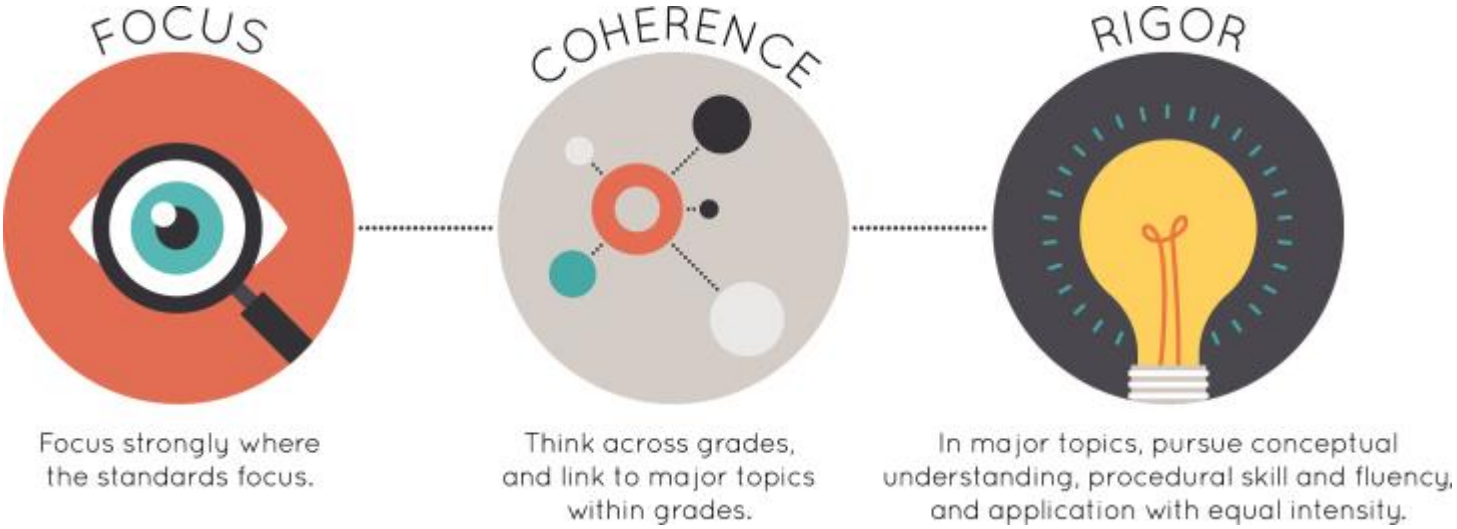
DEPARTMENT of EDUCATION
Louisiana Believes

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

FULL CURRICULUM
Instructional Materials

Strong mathematics instruction contains the following elements:



Title: **Agile Mind Mathematics** Grade/Course: **6-8**

Publisher: **Agile Mind Educational Holdings, Inc.** Copyright: **2016**

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

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

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

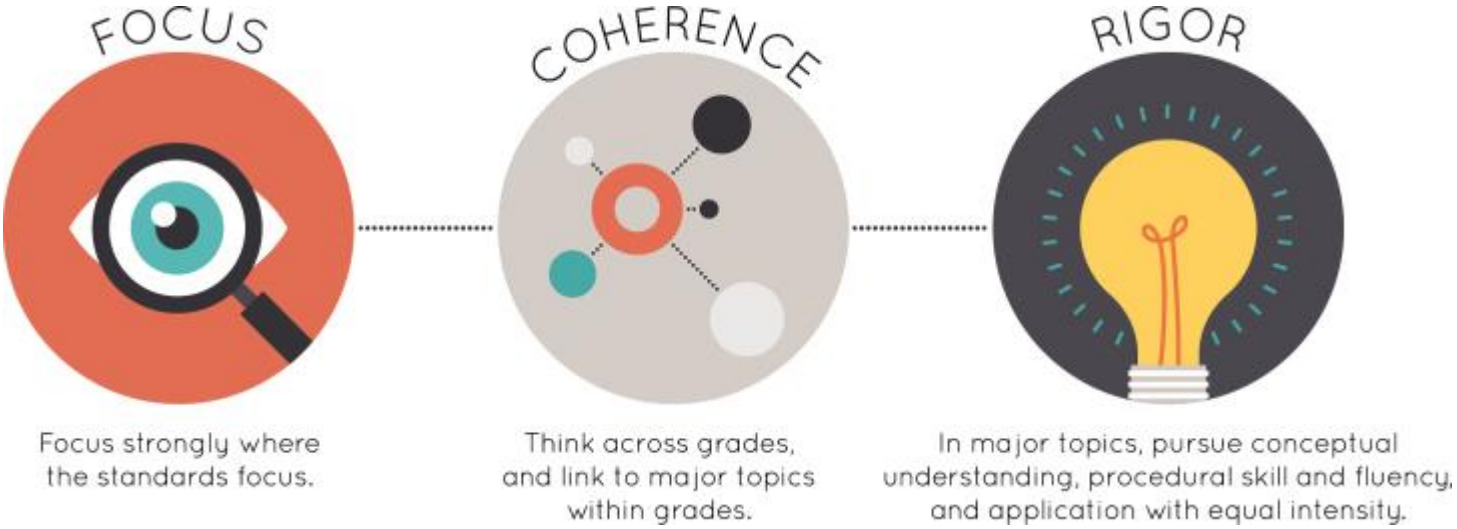
Each set of submitted materials was evaluated for alignment with the standards beginning with a review of the indicators for the non-negotiable criteria. If those criteria were met, a review of the other criteria ensued.

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)

Strong mathematics instruction contains the following elements:



Title: **Agile Mind Mathematics** Grade/Course: **6**

Publisher: **Agile Mind Educational Holdings, Inc.** Copyright: **2016**

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

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

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

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

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
Non-Negotiable **1. FOCUS ON MAJOR WORK[1]:** Students and teachers using the materials as designed devote the large majority[2] of time to the major work of the grade/course. ☒ Yes ☐ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.	**Yes**	Nine of the fifteen topics in Agile Mind Mathematics 6 are entirely dedicated to major cluster work. Four additional topics include blocks of instruction that engage students in major cluster work at least 50% of the time. In Topics 2, 3, 4, 6, 7, 8, 9, 10, and 11 all blocks address major cluster work. These additional blocks also address major cluster work: Topic 1, Operations with whole numbers Blocks 4, 5, 8, and 9 address 6.EE.A.1 and 6.EE.A.2c. Topic 12, Length and area Blocks 6, 11, and 12 address 6.RP.A.3d and 6.NS.C.8. Topic 13, Surface area and volume Blocks 2, 3, and 4 address 6.EE.A.2c. Topic 14, Graphical representations of data Blocks 3, 4, and 6 address 6.RP.A.3c. In total, 93/141 blocks (66%) support major cluster work. (Other blocks throughout the course continue to address major cluster work to reinforce those ideas, but may not represent 50% of the block time. If the time in those blocks that addresses major cluster work is also included, the percentage of time on major cluster work is greater than 66%.)

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

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

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	REQUIRED **1b)** In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment materials, there are no chapter tests, unit tests, or other such assessment components that make students or teachers responsible for any topics before the grade/course in which they are introduced in the Standards.	**Yes**	The Agile Mind Mathematics 6 program assesses grade-level content for each topic in the Automatically scored component. Three topics include content not explicitly required by the standards in grade 6. This content is strategically introduced to deepen student understanding or extend student learning. This content is noted in the Scope and Sequence document. Students are not held accountable for this content on topic-level assessments. In addition, teachers can easily include or omit items from homework assignments and topic quizzes within the Agile Mind system to differentiate instruction for students.
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**	Supporting content is meaningfully connected to major content. 6.G.A is the only supporting cluster in 6th grade. This cluster is addressed in Topics 11 and 12 and is connected to standards from 6.RP, 6.NS, and 6.EE. Lessons that focus on supporting work, such as Topic 11, Block 11, also require and make connections to major work.
	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**	Throughout the curriculum connections are made between standards from three different domains, 6.RP, 6.EE, and 6.NS. These connections will help students better understand the standards in each domain separately, while also creating for the students a coherent learning process across 6th grade. Furthermore, these repeated opportunities for connections also serve to build students' fluency throughout the year.
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,	**REQUIRED** **3a)** ***Attention to Conceptual Understanding:*** Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and discussion questions.	**Yes**	The materials consistently devote ample time to developing students' understanding of key mathematical concepts that are introduced in 6th grade. For example, in Topic 8: Extending the Number System, students are introduced to the idea that numbers can be negative through a banking context. Grounding this introduction in a real-world context helps students connect the abstract concept of negative numbers to a concrete example of money. The Topic goes onto to deepen students

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procedural skill and fluency, and application. ☒ Yes ☐ No			understanding of negative numbers through discussions of absolute value, the number line, and the coordinate plane. Each subsequent discussion helps to deepen students' understanding of signed numbers apart from a focus on operations with signed number which is reserved for 7th grade.
	REQUIRED **3b) *Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	**Yes**	The grade 6 standards require fluency with division of whole numbers and with all four operations with decimals. Fluency is developed across the course, first in the topics Operations with whole numbers, Adding and subtracting rational numbers, and Multiplying and dividing rational numbers. Mathematical fluency is strengthened and reinforced across the course as students apply it to other clusters and domains, such as in the topics Rates and measurement, Equality and inequality, and Length and area. Specific examples include: Topic 1, Operations with whole numbers: In Exploring "Working with whole numbers" (Block 3), students spend time clarifying, practicing, reflecting, and recording their work with the division algorithm (6.NS.B.2), including context-independent practice and formative assessment for the teacher. Fluency notes in the Advice for Instruction, such as in the Block 3 advice for page 10 of that Exploring, describe for teachers how students are developing fluency and how teachers can best support students in doing so. Block 3 Student Activity Sheet provides additional opportunities for practice and reflection to strengthen students' fluency. Topic 5, Adding and subtracting rational numbers: Throughout the topic content and in the Student Activity Sheet work for Blocks 3, 6, and 7, students practice adding and subtracting fractions and multi-digit decimals. (6.NS.B.2). Fluency notes appear in the Advice for Instruction for teachers in multiple blocks. Topic 6, Multiplying and dividing rational numbers: Throughout this topic and in the Student Activity

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			Sheet work for Blocks 4, 7, and 8, students practice multiplying and dividing fractions and multi-digit decimals. (6.NS.B.2; 6.NS.B.3). Fluency notes appear in the Advice for Instruction for teachers in multiple blocks. Topic 11, Using equations and inequalities: In this topic and in the Student Activity Sheet work for Blocks 3, 6, and 8, students strengthen and reinforce their fluency with rational number operations, consolidating their prior work as they solve equations with concrete models and properties of equality. (6.NS.B.2; 6.NS.B.3)
	REQUIRED **3c)** ***Attention to Applications:*** Materials are designed so that teachers and students spend sufficient time working with engaging applications, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/course, afford opportunities for practice, and engage students in problem solving. The problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit.	**Yes**	Through using these materials, students are continually pushed to apply their knowledge and skills to the real world through problems and tasks. More Blocks than not incorporate context allowing students to readily see that what they are learning can be used in the real world. Additionally, the materials seamlessly integrate the tasks from the Mathematics Assessment Resource Service (MARS) collection of tasks. Again, the majority of these tasks require students to connect their developing understanding and skills to a real-world context.
	REQUIRED **3d)** ***Balance:*** The three aspects of rigor are not always treated together and are not always treated separately.	**Yes**	The three aspects of rigor are addressed depending on the concepts, skills, and standards taught in each lesson. Standards that address application use real-world problem solving as needed. While conceptual understanding and procedural skills are addressed as needed by the standards.
Non-Negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Materials promote focus and coherence by connecting practice standards with content that is	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in both teacher and student materials.	**Yes**	It is clear that the Standards for Mathematical Practice greatly influenced the creation of this curriculum. Students are frequently presented with challenging problems for which they have to make sense and persevere in solving them. Additionally, the materials present students with multiple models of mathematical concepts and expect the students in turn to use various models in their thinking and

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emphasized in the Standards. ☒ Yes ☐ No			problem solving. The materials also afford students opportunities to develop their conceptual understanding of key math concepts through asking students to look for and make use of structure and repeated reasoning.
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion **5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:** Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards. ☒ Yes ☐ No	**REQUIRED** **5a)** Materials provide all students extensive work with course-level problems. Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.	**Yes**	Each topic in the Agile Mind Mathematics 6 program consists of instructional content, embedded formative assessment, practice, and topic-level assessments. In the practice and topic-level assessment components alone, each topic has at least 35 online questions. In addition, offline Student Activity Sheets provide additional opportunities to solve problems, including "Review" and "Reinforce" questions so that students can review content from a previous grade or from earlier in the course as well as reinforce grade-level content. The Advice for instruction for each topic contains a section listing the prerequisite skills students will need to be successful with the grade-level content.
	REQUIRED **5b)** Materials relate course-level concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.	**Yes**	A design principle of the Mathematics 6 program is "just-in-time" review of content, which enables students to review knowledge from earlier grades or courses in the context of learning new, on grade-level content. For example, the Overview of Topic 8, Extending the number system, introduces students to the set of integers. In the Exploring “Positive and negative rational numbers,” students revisit prior learning about sets of numbers, including natural numbers and whole numbers, so that students understand that integers are the whole numbers and their opposites and are a subset of rational numbers. Number lines and Venn diagrams clarify the relationships among the various number sets they’ve learned about so far.

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	5c) Materials base content progressions on the progressions in the Standards.	**Yes**	The Agile Mind mathematics programs from grade 6 through high school are designed as a vertical suite. The progression of conceptual learning across the grades presented in the standards is mirrored in the programs. Within the Mathematics 6 program, the course develops with ratio and proportion as the underlying theme. Number work is motivated by multiplicative reasoning developed in prior grades, then further extended after the introduction of ratio and rate reasoning. This is followed by introducing variables, expressions, and equations - these topics include contexts that reinforce and extend both numerical and algebraic reasoning from earlier in the course. Geometry follows this work so that the formulas can serve as examples of equations and opportunities for algebraic reasoning and application of numerical fluency. Finally, students work with data, bringing together all of the key ideas from grade 6.
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings and/or standards.	**Yes**	Each topic has specific support for the teacher in the Advice for Instruction component. Within this component, goals and objectives are identified in each topic's Prepare instruction section. The learning objectives have clear ties to the standards and cluster headings.
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.	**Yes**	The Agile Mind Mathematics 6 program is a standards-based curriculum with guidance taken from the critical areas defined by the standards and the major cluster work. The majority of time in the course is spent on major cluster work. Connections are made throughout the course to maintain coherence. In addition, connections to prior work are made explicit in the materials. A balance of the three aspects of rigor is evident throughout the program, as described in indicator 3d above. For example, in the topic Length and Area, Exploring “Analyzing Shapes with Coordinates,” students work with rational numbers to solve problems by using

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			coordinates to find lengths of geometric figures in the coordinate plane. This reinforces their work with rational numbers from earlier topics and builds on their prior understanding of using length to solve geometric problems in earlier grades, while preparing them for success with more sophisticated work in the coordinate plane in future grades.
Additional Criterion **6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:** Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards. ☒ Yes ☐ No	**REQUIRED** **6a)** Materials attend to the full meaning of each practice standard. Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard. Alignments to practice standards are accurate.	**Yes**	Throughout the programs the materials provide students with ongoing opportunities to develop and demonstrate proficiency with the practice standards, through interactive animations, simulations, extended explorations, and next-generation assessments. For example, in Topic 3, Understanding and representing rates, Exploring "Introduction to rates" page 4, students must look for and make use of structure as they investigate relationships among quantities and rates using multiple representations. In Topic 8, Extending the number system, Exploring "Positive and negative rational numbers," page 6, students engage in an animation that requires them to reason abstractly and quantitatively as they translate verbal statements into symbolic inequalities. In Topic 15, Describing data, Blocks 5 and 11 each provide support for promoting multiple standards for mathematical practice. Students are provided with Constructed response tasks that require them to make sense of the problems, communicate ideas, and justify mathematical arguments. MARS tasks appear throughout the course to provide rich problem-solving opportunities that promote student engagement in multiple practices. Additional examples of the program's treatment of the practice standards can be found on a dedicated, Practice Standards Connections page in the

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			Professional Support section for educators.
	REQUIRED **6b)** Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics that is detailed in the content standards (cf. MP.3). Materials engage students in problem solving as a form of argument, attending thoroughly to places in the Standards that explicitly set expectations for multi-step problems.	**Yes**	Throughout the program are embedded tasks that require students to develop ideas and defend their thinking to peers. In addition to instructional content that prompts mathematical argumentation, multi-step problems such as Constructed response questions and MARS tasks often require students to construct viable arguments and critique the reasoning of their classmates. The Advice for Instruction also provides teachers with guidance on promoting this practice throughout the course. Examples of specific support for this practice standard can be found in the Practice Standards Connections page of Professional Support. Topic 1, Operations with whole numbers: Exploring “Factoring and prime factorization” page 10; Deliver instruction Block 5 Constructed response 2; Deliver instructions Block 8 Topic 2, Understanding and representing ratios: Constructed response 2; Deliver instruction Block 6 Topic 3, Understanding and representing rates: Exploring “Introduction to rates” pages 6-7; Deliver instruction Block 2 Exploring “Solving problems using rates” page 7; Deliver instruction Block 5 Topic 12, Length and area: Exploring “Estimating measurements in length and area” page 1; Deliver instruction Block 1 Exploring “Finding length and area” page 4; Deliver instruction Block 6 Exploring “Analyzing shapes with coordinates” page 10; Deliver instruction Block 12 Topic 15, Describing data: MARS task: Suzi's company; Deliver instruction Block 5

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			MARS task: TV hours; Deliver instruction Block 11
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	**Yes**	As communicated directly to teachers in the online "Practice Standards Connections" section in the Professional Support area, the practice standards have a central role in instruction: they represent the natural ways in which students come to understand and do mathematics. This dedicated page also provides numerous examples throughout the course related to each practice standard. The role of the practice standards is also communicated directly to teachers through the Advice for Instruction that accompanies each topic by connecting the practices to specific mathematical content. The Advice for Instruction provides detailed lesson guidance for teachers, including page-by-page advice for facilitating content explorations and probing, scaffolding, and extension questions to promote appropriate or useful mathematical practices. In particular, the Advice for Instruction for MARS tasks gives teachers explicit guidance in how to help their students develop proficiency with the math practices so that students are equipped to continue to demonstrate the practice standards as they engage with the mathematical content throughout the course. For example, Topic 12, Length and area, Block 8 provides explicit guidance to teachers in support of several practice standards: Using appropriate tools strategically; Attend to precision; and Look for and make use of structure.
	6d) Materials explicitly attend to the specialized language of mathematics.	**Yes**	Precise mathematical language and notation is used throughout the Agile Mind Mathematics 6 program. The instructional components model precise language and help students make sense of new terms. The Advice for Instruction gives support to teachers for encouraging students to use precise language, including a Language support section that calls out key vocabulary within the topic. Language

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			strategies in the page-by-page lesson advice provide guidance for teachers to engage students in mathematical language in appropriate ways.
Additional Criterion **7. INDICATORS OF QUALITY:** Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards. ☒ Yes ☐ No	**REQUIRED** **7a)** There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.	**Yes**	Throughout the Agile Mind course programs, students engage in mathematics in a variety of ways and produce a variety of types of work. In addition to extensive opportunities in the online system to engage in a variety of problem-solving situations and assessment items types, students use Student Activity Sheets (SAS) to record their thinking and problem solving, review prior knowledge, and reinforce new learning. Constructed response items in each topic provide opportunities for students to express their understanding in a variety of ways. Examples include: Topic 1, Operations with whole numbers, asks students to produce electronic diagrams and sketches to demonstrate their understanding of ways to model multiplication and division and whole numbers. In Topic 13, Surface area and volume, students assemble 2-D and 3-D models and use those models to determine surface area or volume in related real-world contexts. Topic 15, Describing data, requires students to produce a variety of work products. In this topic, students interpret and generate multiple representations of data, including histograms, dot plots, and box and whisker plots. They also select, calculate, and use a variety of measures of center or spread in order to support their written statistical claims and conclusions.
	REQUIRED **7b)** There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the	**Yes**	The professional tools and support within Agile Mind equip teachers with Dana Center-designed strategies and methods for engagement, review, discussion, exploration of multiple solution paths,

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	mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students' responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.		and practice with new content, as well as with continuing opportunities to develop mastery. The Scope and Sequence and Advice for Instruction for teachers and other resources in the Professional Support section contain multiple types of lesson guidance, including high-level planning and organization support, sequencing support, goals and objectives, and information that helps teachers situate the mathematics students are learning in the overall landscape of the mathematics of the grade and of prior and future courses. Detailed, page-by-page lesson advice provides guidance for facilitating content explorations and probing, scaffolding, and extension questions to elevate teacher-student interactions beyond simple "question and answer" routines. The professional support is designed to inform teachers of key concepts being introduced on each page and provides strategies for teaching in the classroom. It includes language and literacy supports, suggestions for opening the lesson, framing questions, and detailed lesson activities. Proven instructional principles embedded in the content support educators day-to-day as they continuously refine their skills and implement exemplary teaching practices.
	7c) Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. The language in which problems are posed is carefully considered.	**Yes**	The Mathematics 6 program embeds an array of rich supports for English language learners and other hesitant learners. The instructional content, assessment, advice, and progress-monitoring resources ensure that all students can benefit from evidence-based, standards-aligned curricula and instruction and help identify those at risk. The program helps scaffold student learning towards mastery of rigorous content by enabling students to interact with the content at many levels.

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			Agile Mind structures all of the resources so that both the program and the teacher can provide multiple pathways for learners. The assessment tools and content make data about student behavior—including performance on assigned tasks and assessment items—available to teachers in real time. Having access to data supports rapid diagnosis of challenges and opportunities and thereby authentic personalization, and to address differences in learning needs early. Students have access to the same curriculum content and structure of information that teachers present to them in class—both before and after instruction—enabling them to engage and re-engage with the content at their own pace. Whether students engage on their own or with the support of others outside the classroom, their classroom experience is completely supported and reinforced—in vivid imagery, in puzzles, in problems, and in instructional material. The embedded Advice for Instruction includes guidance for teachers on how to best facilitate text-based content to support students in developing their academic literacy skills. Specific strategies, such as teacher or student think-alouds, read-pair-shares, and paired readings are recommended strategically throughout the course. Additionally, in the Advice for Instruction for each topic, the Prepare instruction planning resource includes a “Language Support” section, which presents new vocabulary. When a word has multiple meanings or there are potential misconceptions, a “Language note” may be included in the instructional content to help the teacher and students focus specifically on those words and to support the transition to academic language. "Language strategies" in the Advice for Instruction support teachers as they engage students in new academic language. One example of a Language note is in Topic 4, Equivalent forms: fractions, decimals, and percent,

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			Exploring "Fractions and decimals" page 1, to help clarify for students the meaning of the word 'rational.' The Advice for Instruction for that page includes a Language strategy to support teachers. In addition, an extensive glossary of key mathematical terms is provided in both Spanish and English.
	7d) The underlying design of the materials distinguishes between problems and exercises. In essence the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.	**Yes**	The underlying design of the Agile Mind program is to first engage students in solving problems to motivate learning and develop mathematical understanding. The program then provides a variety of exercises, both in and out of context, that allow students to apply what they have learned. For example, in Topic 1, Operations with whole numbers, Exploring "Using common multiples and factors," students solve a problem of creating the greatest number of prize bags that contain two items, given a set number of each of the items. This problem helps students learn about the concept of the greatest common factor of two numbers. Students then learn how to apply prime factorization to find the greatest common factor of two numbers. Students then complete exercises in finding common factors, including the greatest common factor, including Block 6 Student Activity Sheet REINFORCE questions 6a-f, Guided practice question 12, and More practice question 4. In the Overview of Topic 10, Equality and inequality, students solve a famous puzzle to deepen conceptual understanding of properties of equality and inequality. Exercises on the Student Activity Sheets throughout the topic and in the Guided practice and More practice components require students to apply the properties to contextual and non-contextual problems.
	7e) Lessons are appropriately structured and scaffolded to support student mastery.	**Yes**	In the Agile Mind Mathematics 6 program, teachers enact and sustain rigorous, well-scaffolded

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			instruction and practice that ensure academic success. Each lesson in the program builds on prior knowledge, which is then used to build conceptual understanding. Each topic opens with an Overview that introduces the mathematics of the topic with animations, simulations, and real-world scenarios. The Overview serves as a launch for deeper study—students do not "pass" or "fail" but rather engage in scenarios designed to capture their interest and make them want to learn more about the mathematical ideas contained in the topic. Approaching concepts in the context of the real world engages students to build a strong foundational understanding, to retain knowledge longer, and to work toward mastery faster. Visualizations help students learn concepts more efficiently and more deeply. Explorings offer overarching questions to drive student inquiry, help students make connections, and support the development of deep understanding. Guiding questions embedded throughout the topic enable teachers to further build students' conceptual understanding as they evaluate evidence and revise their thinking. The ongoing use of interactive animations of key concepts and interactive problem solving further instills in students the engagement, persistence, and consistency of learning practices to succeed. Students master and apply the key concepts and skills to represent problem situations, typically employing multiple representations of concepts to help all learners find entry points to content, make connections among ideas, and achieve mastery of concepts and skills. The instructional components include text, illustrations, tables, graphs, and animations and encompass every major concept in the course. Teachers use them to support the enactment of instruction, and students can use the materials for review on their own; thereby extending the instructional experience beyond class.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	7f) Materials support the uses of technology as called for in the Standards.	**Yes**	Technology is an integral part of the Agile Mind course programs. Dynamic animations are a signature use of technology in the materials. Used throughout the topics in the Math 6 program, these animations enable students to build conceptual understanding by visualizing the results of varying assumptions, exploring consequences, and comparing predictions with data. In addition, each topic includes novel, technology-enhanced items for formative assessment. Other technology tools are used to enhance student learning, as students learn to make use of technology appropriately. For example: In Topic 6, Multiplying and dividing rational numbers, a 'Classroom strategy' in the Block 5 Deliver instruction suggests using a calculator as a tool to produce large numbers of decimal products to help develop student intuition about decimal point placement. In Topic 7, Block 2 Deliver Instruction, teachers are advised to use hand-held motion detectors to set the stage for use of an online motion simulation in the lesson. In Topic 14, Graphical representations of data, Block 5 Deliver instruction discusses the role of technology in creating statistical graphs.

FINAL EVALUATION

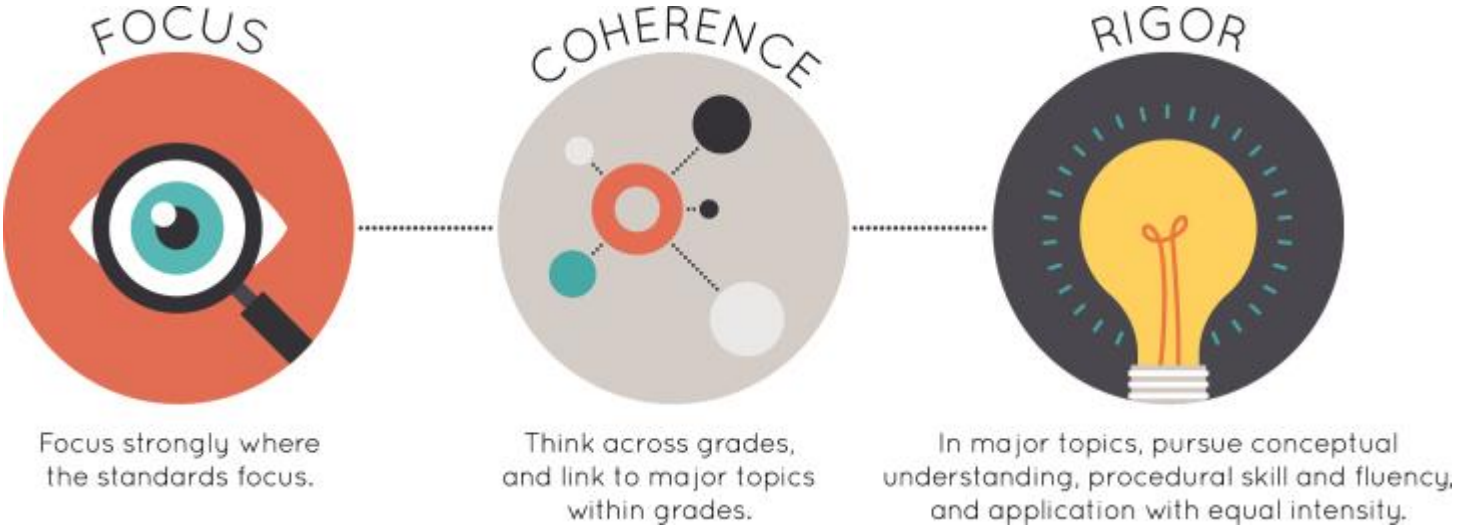
Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

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

Section	Criteria	Yes/No	Final Justification/Comments

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
I: Non-Negotiables	1. Focus on Major Work	**Yes**	The materials focus the majority of class time on the major work of the grade. In addition, there is no assessment that holds students or teachers responsible for content that is beyond the scope of the grade.
	2. Consistent, Coherent Content	**Yes**	Supporting content supports the major work of the grade and materials feature problems and activities that combine standards that address multiple clusters and domains.
	3. Rigor and Balance	**Yes**	Materials present content both separately and together in correlation with the three aspects of rigor as required by the standard.
	4. Focus and Coherence via Practice Standards	**Yes**	Math practices and their descriptions enrich the content of the grade level.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Materials are aligned to the mathematical practices, relate prior knowledge to current topics, and represent the standards accurately.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	Materials attend to the specialized vocabulary for mathematics and align as intended to the mathematical practices, especially MP.3.
	7. Indicators of Quality	**Yes**	Materials are scaffolded to accommodate new learning, support is provided for ELL learners and special populations, and materials use technology as called for in the standards.
FINAL DECISION FOR THIS MATERIAL: **Tier I, Exemplifies quality**			

Strong mathematics instruction contains the following elements:



Title: **Agile Mind Mathematics** Grade/Course: **7**

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

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

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

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

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
Non-Negotiable **1. FOCUS ON MAJOR WORK[3]:** Students and teachers using the materials as designed devote the large majority[4] of time to the major work of the grade/course. ☒ Yes ☐ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.	**Yes**	Eight of the fifteen topics in Agile Mind Mathematics 7 are entirely dedicated to major cluster work. Each of the remaining seven topics include blocks of instruction that engage students in major cluster work at least 50% of the time. In Topics 1, 2, 3, 4, 5, 6, 7, and 8, all blocks address major cluster work. These additional blocks also address major cluster work: Topic 9, Probability: Blocks 6, 8, 9, 10, and 11 address 7.NS.A.3, 7.EE.B.3, and 7.RP.A.3. Topic 10, Representing and interpreting data: Blocks 4, 8, and 10 (continuing into Blocks 11 and 12) address 7.NS.A.3. Topic 11, Designing experiments: Blocks 3, 4, and 5 address 7.NS.A.3, 7.EE.B.3, and 7.RP.A.3. Topic 12, Angles and triangles: Blocks 2 and 4 address 7.EE.B.4a. Topic 13 Solving problems with 2-D shapes: Blocks 6, 7, and 8 address 7.NS.A.3 and 7.EE.B.3. Topic 14 Prisms, pyramids, and plane sections: Blocks 2, 3, 4, 5, and 6 address 7.NS.A.3 and 7.EE.B.3. Topic 15 Effects of change: Blocks 2, 4, 5, and 6 address 7.NS.A.3, 7.EE.B.3,

[3] For more on the major work of the grade, see Focus by Grade Level.
[4] The materials should devote at least 65% and up to approximately 85% of class time to the major work of the grade with Grades K–2 nearer the upper end of that range, i.e., 85%.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			7.RP.A.1, and 7.RP.A.3. In total, 103/142 blocks (73%) support major cluster work.
	REQUIRED **1b)** In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment materials, there are no chapter tests, unit tests, or other such assessment components that make students or teachers responsible for any topics before the grade/course in which they are introduced in the Standards.	**Yes**	The Agile Mind Mathematics 7 program assesses grade-level content for each topic in the Automatically scored component. In addition, teachers can easily include or omit items from homework assignments and topic quizzes within the Agile Mind system to differentiate instruction for students.
Non-Negotiable **2. CONSISTENT, COHERENT CONTENT** Each course's instructional materials are coherent and consistent with the content in the Standards. ☒ Yes ☐ No	**REQUIRED** **2a)** Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.	**Yes**	The Agile Mind Mathematics 7 program is designed to ensure that supporting content enhances the focus and coherence simultaneously by engaging students in the major work of the grade. In particular, ratio and rate reasoning is reinforced throughout the course, starting with the two early topics related to ratios and rates followed by a topic introducing proportional relationships. The fraction and percent work in grade 7 is done in service of proportional reasoning, as supported by critical areas 1 and 2 for grade 7. As described in criterion 1a above, the course integrates major work into the supporting content of the geometry and data topics as well. Examples of integration of major work and supporting content include: Topic 9, Probability Blocks 6, 8, 9, 10, and 11 integrate 7.SP.C with 7.NS.A.3, 7.EE.B.3, and 7.RP.A.3. Topic 10, Representing and interpreting data Blocks 4, 8, and 10 (continuing into Blocks 11 and 12) connect the major content in 7.NS.A.3 with the supporting content in 7.SP.A.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Topic 11, Designing experiments Blocks 3, 4, and 5 connect the supporting content in 7.SP.C to the major content in 7.NS.A.3, 7.EE.B.3, and 7.RP.A.3. Topic 12, Angles and triangles Blocks 2 and 4 integrate the supporting content in 7.G.A and 7.G.B to the major content 7.EE.B.4a.
	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**	Throughout the curriculum connections are made between standards from three different domains, 7.RP, 7.EE, and 7.NS. These connections will help students better understand the standards in each domain separately, while also creating for the students a coherent learning process across 7th grade. Furthermore, these repeated opportunities for connections also serve to build students' fluency throughout the year.
Non-Negotiable **3. RIGOR AND BALANCE:** Each grade's instructional materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application. ☒ Yes ☐ No	**REQUIRED** **3a)** ***Attention to Conceptual Understanding:*** Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and discussion questions.	**Yes**	The materials consistently devote ample time to developing students' understanding of key mathematical concepts that are introduced in 7th grade. For example, in Topic 6: Adding and Subtracting Integers, students are not presented with a list of rules for adding and subtracting integers and, subsequently, a long list of problems with which to practice; rather, students spend time using manipulatives and models (e.g., algebra tiles and horizontal and vertical number lines) to develop their understanding of what happens when adding and/or subtracting signed numbers. Through this time spent developing their conceptual understanding, students will be able to better and more quickly develop their skill and fluency in performing these operations on signed numbers, as well as be able to assess the reasonableness of their answers when performing calculations in context.
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the	**Yes**	The grade 7 standards require fluency with solving 2 step equations. Examples include: In Topic 8, Equations and inequalities, is supported

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	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.		throughout the instructional blocks with practice problems, both in the online assessment components as well as in the printable Student Activity Sheets to strength student fluency in manipulating expressions and solving equations. Students continue to build and demonstrate their fluency with equations in Topic 12, Angles and triangles. In particular, Block 2 Student Activity Sheets provides an opportunity for students to write and solve equations related to angle relationships before moving on to triangle relationships. In this block, students demonstrate fluency with equations in solving geometric problems.
	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**	Through using these materials, students are continually pushed to apply their knowledge and skills to the real world through problems and tasks. More Blocks than not incorporate context allowing students to readily see that what they are learning can be used in the real world. Additionally, the materials seamlessly integrate the tasks from the Mathematics Assessment Resource Service (MARS) collection of tasks. Again, the majority of these tasks require students to connect their developing understanding and skills to a real-world context.
	REQUIRED **3d) *Balance:*** The three aspects of rigor are not always treated together and are not always treated separately.	**Yes**	The three aspects of rigor are addressed depending on the concepts, skills, and standards taught in each lesson. Standards that address application use real-world problem solving as needed. While conceptual understanding and procedural skills are addressed as needed by the standards.
Non-Negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Materials promote focus and	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the	**Yes**	The three aspects of rigor are addressed depending on the concepts, skills, and standards taught in each lesson. Standards that address application use real-world problem solving as needed. While conceptual understanding and procedural skills are addressed

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
coherence by connecting practice standards with content that is emphasized in the Standards. ☒ Yes ☐ No	content standards instead of detracting from them, in both teacher and student materials.		as needed by the standards.
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion **5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:** Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards. ☒ Yes ☐ No	**REQUIRED** **5a)** Materials provide all students extensive work with course-level problems. Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.	**Yes**	Each topic in the Agile Mind Mathematics 7 program consists of instructional content, embedded formative assessment, practice, and topic-level assessments. In the practice and topic-level assessment components alone, each topic has at least 35 online questions. In addition, offline Student Activity Sheets provide additional opportunities to solve problems, including "Review" and "Reinforce" questions so that students can review content from a previous grade or from earlier in the course as well as reinforce grade-level content. The Advice for instruction for each topic contains a section listing the prerequisite skills students will need to be successful with the grade-level content.
	REQUIRED **5b)** Materials relate course-level concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.	**Yes**	A design principle of the Mathematics 7 program is "just-in-time" review of content, which enables students to review knowledge from earlier grades or courses in the context of learning new, on grade-level content. For example, the Overview of Topic 1, Using ratios, begins by reviewing students' knowledge of representing ratios. This knowledge is then extended to helping students understand proportional relationships. In Topic 13, Solving problem with 2-D shapes, the Overview reminds students of attributes of a polygon and formulas for area and perimeter that they should know from previous courses. This work

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			is then built upon to develop formulas for circumference and area of circles and areas of polygons.
	5c) Materials base content progressions on the progressions in the Standards.	**Yes**	The Agile Mind mathematics programs from grade 6 through high school are designed as a vertical suite. The progression of conceptual learning across the grades presented in the standards is mirrored in the programs. Within the Mathematics 7 program, the course develops with ratio and proportion as the underlying theme. The grade 7 course builds on the grade 6 introductions to ratios and rates by engaging students in more sophisticated proportional reasoning with ratios, rates, and percent. The work with probability and rational numbers is also motivated by ratio reasoning. Students extend their work with simple 1-step equations in grade 6 to solving 2-step equations in grade 7. Students build on their work with geometric properties and measurement from grade 6, as they investigate the relationships among circumference, area, and radius in circles. The grade 7 course materials also engage students in more sophisticated data analysis across multiple sets of data, connecting to prior work in grade 6 with single data sets.
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings and/or standards.	**Yes**	Each topic has specific support for the teacher in the Advice for Instruction component. Within this component, goals and objectives are identified in each topic's Prepare instruction section. The learning objectives have clear ties to the standards and cluster headings.
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.	**Yes**	The Agile Mind Mathematics 7 program is a standards-based curriculum with guidance taken from the critical areas defined by the standards and the major cluster work. The majority of time in the course is spent on major cluster work. Connections are made throughout the course to maintain coherence. In addition, connections to prior work

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			are made explicit in the materials. A balance of the three aspects of rigor is evident throughout the program, as described in indicator 3d above. For example, in Topic 10: Representing and interpreting data, students work with multiple data sets which include all forms of rational numbers (7.SP.B.4). This content reinforces 7.NS.A and builds on students' prior work analyzing single data sets with positive rational numbers in Grade 6 (6.SP.A.5), and lays the foundation conceptually and procedurally for more sophisticated work with bivariate data (8.SP.A).
Additional Criterion **6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:** Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards. ☒ Yes ☐ No	**REQUIRED** **6a)** Materials attend to the full meaning of each practice standard. Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard. Alignments to practice standards are accurate.	**Yes**	Throughout the programs the materials provide students with ongoing opportunities to develop and demonstrate proficiency with the practice standards, through interactive animations, simulations, extended explorations, and next-generation assessments. For example, in Topic 3, Patterns in proportional relationships, Exploring "Proportional and non-proportional relationships" page 5, students reason abstractly and computationally as they translate an algebraic relationship from words into tables, graphs and algebraic rules. In Topic 8, Equations and inequalities, Exploring "Linear expressions and equations" page 1, students look for and make use of structure and they use an animation to explore linear growth in diagrams, numerical tables, and algebraic rules. In Topic 12 Angles and Triangles, Blocks 2, 3 and 7 each provide support for promoting multiple standards for mathematical practice. Throughout the course, students are provided with Constructed response tasks that require them to make sense of problems, communicate ideas, and justify mathematical arguments. MARS tasks also appear throughout the course to provide rich problem-solving opportunities that promote student

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			engagement in multiple practices. For example, in Topic 1 Using ratios, Block 7, support is provided for the MARS task: Cereal, which promotes multiple practices. Additional examples of the program's treatment of the practice standards can be found on a dedicated, Practice Standards Connections page in the Professional Support section for educators.
	REQUIRED **6b)** Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics that is detailed in the content standards (cf. MP.3). Materials engage students in problem solving as a form of argument, attending thoroughly to places in the Standards that explicitly set expectations for multi-step problems.	**Yes**	Throughout the program are embedded tasks that require students to develop ideas and defend their thinking to peers. In addition to instructional content that prompts mathematical argumentation, multi-step problems such as Constructed response questions and MARS tasks often require students to construct viable arguments and critique the reasoning of their classmates. The Advice for Instruction also provides teachers with guidance on promoting this practice throughout the course. Examples of specific support for this practice standard can be found in the Practice Standards Connections page of Professional Support. Topic 1 Using ratios: MARS task: Mixing paints; Deliver instruction Block 5 MARS task: Cereal; Deliver instruction Block 7 Topic 2 Ratios and rates: Exploring "Unit rates" page 7; Deliver instruction Block 4 Topic 3 Patterns in proportional relationships: Exploring "Proportional and non-proportional relationships" page 6; Deliver instruction Block 3 Topic 8 Equations and inequalities: Constructed response 1; Deliver instruction Block 6 Topic 12 Angles and triangles: Block 7 Student Activity Sheet; Deliver instruction

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Block 7 Topic 10 Representing and interpreting data: MARS task: Best Guess; Deliver instruction Block 8
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	**Yes**	As communicated directly to teachers in the online "Practice Standards Connections" section in the Professional Support area, the practice standards have a central role in instruction: they represent the natural ways in which students come to understand and do mathematics. This dedicated page also provides numerous examples throughout the course related to each practice standard. The role of the practice standards is also communicated directly to teachers through the Advice for Instruction that accompanies each topic by connecting the practices to specific mathematical content. The Advice for Instruction provides detailed lesson guidance for teachers, including page-by-page advice for facilitating content explorations and probing, scaffolding, and extension questions to promote appropriate or useful mathematical practices. In particular, the Advice for Instruction for MARS tasks gives teachers explicit guidance in how to help their students develop proficiency with the math practices so that students are equipped to continue to demonstrate the practice standards as they engage with the mathematical content throughout the course. For example, Topic 4, Applications of percent, Block 8 provides explicit guidance to teachers in support of two practice standards: Attend to precision and Make sense of problems and persevere in solving them.
	6d) Materials explicitly attend to the specialized language of mathematics.	**Yes**	Precise mathematical language and notation is used throughout the Agile Mind Mathematics 7 program. The instructional components model precise language and help students make sense of new terms. The Advice for Instruction gives support to

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			teachers for encouraging students to use precise language, including a Language support section that calls out key vocabulary within the topic. Language strategies in the page-by-page lesson advice provide guidance for teachers to engage students in mathematical language in appropriate ways.
Additional Criterion **7. INDICATORS OF QUALITY:** Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards. ☒ Yes ☐ No	**REQUIRED** **7a)** There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.	**Yes**	Throughout the Agile Mind course programs, students engage in mathematics in a variety of ways and produce a variety of types of work. In addition to extensive opportunities in the online system to engage in a variety of problem-solving situations and assessment items types, students use Student Activity Sheets (SAS) to record their thinking and problem solving, review prior knowledge, and reinforce new learning. Constructed response items in each topic provide opportunities for students to express their understanding in a variety of ways. Examples include: In Topic 8 Equations and inequalities, Exploring "Modeling and solving linear equations," students use an animation to create models of equations in one variable on a balance scale, then solve the equation using inverse operations. In Topic 11 Designing experiments, Student Activity Sheet Block 4, students design a simulation to find probabilities in a baseball game scenario. In Topic 15 Effects of change, Constructed response 1, students create scale drawings of floor plans using different scales and find the perimeters and areas of various rooms in their plan.
	REQUIRED **7b)** There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student	**Yes**	The professional tools and support within Agile Mind equip teachers with Dana Center-designed strategies and methods for engagement, review, discussion, exploration of multiple solution paths, and practice with new content, as well as with continuing opportunities to develop mastery.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	ways of thinking and anticipating a variety of students' responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.		The Scope and Sequence and Advice for Instruction for teachers and other resources in the Professional Support section contain multiple types of lesson guidance, including high-level planning and organization support, sequencing support, goals and objectives, and information that helps teachers situate the mathematics students are learning in the overall landscape of the mathematics of the grade and of prior and future courses. Detailed, page-by-page lesson advice provides guidance for facilitating content explorations and probing, scaffolding, and extension questions to elevate teacher-student interactions beyond simple "question and answer" routines. The professional support is designed to inform teachers of key concepts being introduced on each page and provides strategies for teaching in the classroom. It includes language and literacy supports, suggestions for opening the lesson, framing questions, and detailed lesson activities. Proven instructional principles embedded in the content support educators day-to-day as they continuously refine their skills and implement exemplary teaching practices.
	7c) Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. The language in which problems are posed is carefully considered.	**Yes**	The Mathematics 7 program embeds an array of rich supports for English language learners and other hesitant learners. The instructional content, assessment, advice, and progress-monitoring resources ensure that all students can benefit from evidence-based, standards-aligned curricula and instruction and help identify those at risk. The program helps scaffold student learning towards mastery of rigorous content by enabling students to interact with the content at many levels. Agile Mind structures all of the resources so that both the program and the teacher can provide multiple pathways for learners. The assessment

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			tools and content make data about student behavior—including performance on assigned tasks and assessment items—available to teachers in real time. Having access to data supports rapid diagnosis of challenges and opportunities and thereby authentic personalization, and to address differences in learning needs early. Students have access to the same curriculum content and structure of information that teachers present to them in class—both before and after instruction—enabling them to engage and re-engage with the content at their own pace. Whether students engage on their own or with the support of others outside the classroom, their classroom experience is completely supported and reinforced—in vivid imagery, in puzzles, in problems, and in instructional material. The embedded Advice for Instruction includes guidance for teachers on how to best facilitate text-based content to support students in developing their academic literacy skills. Specific strategies, such as teacher or student think-alouds, read-pair-shares, and paired readings are recommended strategically throughout the course. Additionally, in the Advice for Instruction for each topic, the Prepare instruction planning resource includes a “Language Support” section, which presents new vocabulary. When a word has multiple meanings or there are potential misconceptions, a “Language note” may be included in the instructional content to help the teacher and students focus specifically on those words and to support the transition to academic language. "Language strategies" in the Advice for Instruction support teachers as they engage students in new academic language. One example of a Language note is in Topic 1, Using ratios, Exploring "Applying proportional reasoning" page 6 which helps to clarify for students the meaning of the word "sample" in a data-collection context. The Advice for Instruction for that page

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			includes a Language strategy to support teachers. In addition, an extensive glossary of key mathematical terms is provided in both Spanish and English.
	7d) The underlying design of the materials distinguishes between problems and exercises. In essence the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.	**Yes**	The underlying design of the Agile Mind program is to first engage students in solving problems to motivate learning and develop mathematical understanding. The program then provides a variety of exercises, both in and out of context, that allow students to apply what they have learned. For example, in Topic 13, Solving problems with 2-D shapes, students solve a problem that investigates how the perimeter of polygons change as the number of sides increase in order to motivate an understanding of the relationships in a circle between pi, diameter, and circumference. Students then complete exercises in finding measures in circles, including questions 2-5 on Block 2 Student Activity Sheet and More practice, questions 4-9.
	7e) Lessons are appropriately structured and scaffolded to support student mastery.	**Yes**	In the Agile Mind Mathematics 7 program, teachers enact and sustain rigorous, well-scaffolded instruction and practice that ensure academic success. Each lesson in the program builds on prior knowledge, which is then used to build conceptual understanding. Each topic opens with an Overview that introduces the mathematics of the topic with animations, simulations, and real-world scenarios. The Overview serves as a launch for deeper study—students do not “pass” or “fail” but rather engage in scenarios designed to capture their interest and make them want to learn more about the mathematical ideas contained in the topic. Approaching concepts in the context of the real world engages students to build a strong foundational understanding, to retain knowledge longer, and to work toward mastery faster. Visualizations help students learn concepts more efficiently and more deeply.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Explorings offer overarching questions to drive student inquiry, help students make connections, and support the development of deep understanding. Guiding questions embedded throughout the topic enable teachers to further build students' conceptual understanding as they evaluate evidence and revise their thinking. The ongoing use of interactive animations of key concepts and interactive problem solving further instills in students the engagement, persistence, and consistency of learning practices to succeed. Students master and apply the key concepts and skills to represent problem situations, typically employing multiple representations of concepts to help all learners find entry points to content, make connections among ideas, and achieve mastery of concepts and skills. The instructional components include text, illustrations, tables, graphs, and animations and encompass every major concept in the course. Teachers use them to support the enactment of instruction, and students can use the materials for review on their own; thereby extending the instructional experience beyond class.
	7f) Materials support the uses of technology as called for in the Standards.	**Yes**	Technology is an integral part of the Agile Mind course programs. Dynamic animations are a signature use of technology in the materials. Used throughout the topics in the Math 7 program, these animations enable students to build conceptual understanding by visualizing the results of varying assumptions, exploring consequences, and comparing predictions with data. In addition, each topic includes novel, technology-enhanced items for formative assessment. Other technology tools are used to enhance student learning, as students learn to make use of technology appropriately. For example:

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			In Topic 8, Equations and inequalities, Block 5 suggests the use of graphing calculators to extend students' understanding of the meaning of a solution to an equation, both graphically and in a table. In Topic 13, Solving problems with 2-D shapes, Block 5 suggests the use of an alternate geometry program, such as Geometer's Sketchpad®, to explore how to find the area of various quadrilaterals.

FINAL EVALUATION

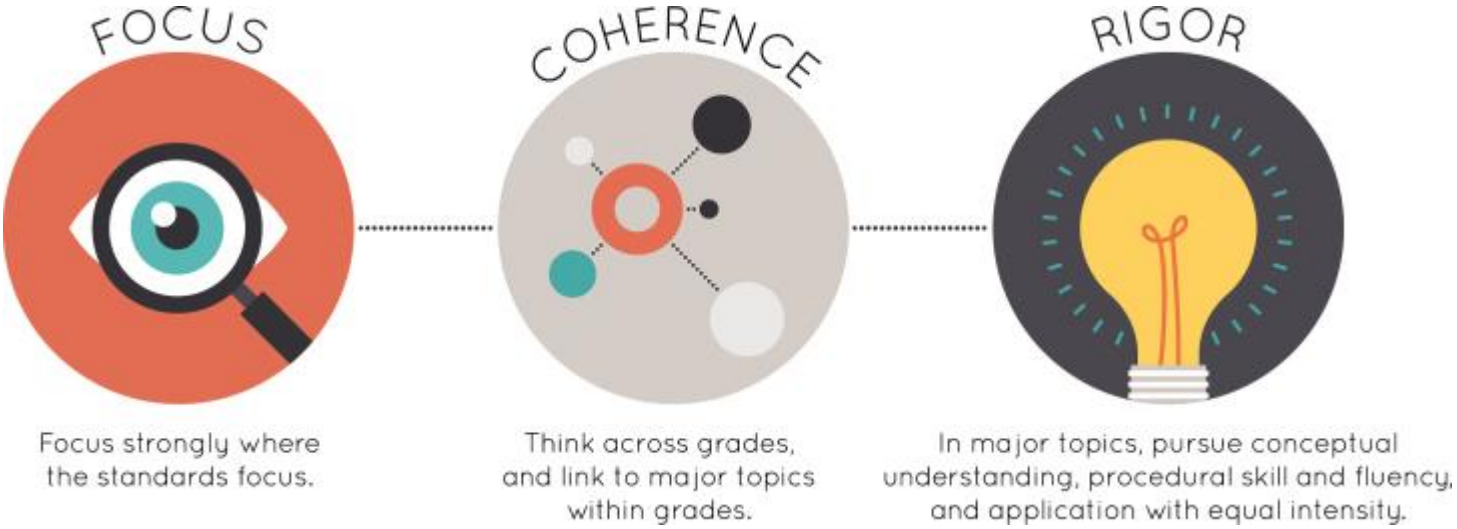
Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

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

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	**Yes**	The materials focus the majority of class time on the major work of the grade. In addition, there is no assessment that holds students or teachers responsible for content that is beyond the scope of the grade.
	2. Consistent, Coherent Content	**Yes**	Supporting content supports the major work of the grade and materials feature problems and activities that combine standards that address multiple clusters and domains.
	3. Rigor and Balance	**Yes**	Materials present content both separately and together in correlation with the three aspects of rigor as required by the standard.
	4. Focus and Coherence via Practice Standards	**Yes**	Math practices and their descriptions enrich the content of the grade level.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Materials are aligned to the mathematical practices, relate prior knowledge to current topics, and represent the standards accurately.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	Materials attend to the specialized vocabulary for mathematics and align as intended to the mathematical practices, especially MP.3.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	7. Indicators of Quality	**Yes**	Materials are scaffolded to accommodate new learning, support is provided for ELL learners and special populations, and materials use technology as called for in the standards.
FINAL DECISION FOR THIS MATERIAL: **Tier I, Exemplifies quality**			

Strong mathematics instruction contains the following elements:



Title: **Agile Mind Mathematics** Grade/Course: **8**

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

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

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

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

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
Non-Negotiable **1. FOCUS ON MAJOR WORK[5]:** Students and teachers using the materials as designed devote the large majority[6] of time to the major work of the grade/course. ☒ Yes ☐ No	**REQUIRED** **1a)** Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.	**Yes**	Twelve of the fifteen topics in Agile Mind Mathematics 8 are entirely dedicated to major cluster work. Two of the remaining three topics include blocks of instruction that engage students in major cluster work. In Topics 1, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, and 14 all blocks address major cluster work These additional blocks also address major cluster work: Topic 2, Real numbers: Blocks 9 and 10 address 8.EE.A.2. Topic 9, Exploring bivariate data: Blocks 1, 2, 4, and 6 address 8.F.A.3 and 8.F.B.4. In total, 107/132 blocks (81%) support major cluster work.
	REQUIRED **1b)** In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment materials, there are no chapter tests, unit tests, or other such assessment components that make students or teachers responsible for any topics before the grade/course in which they are introduced in the Standards.	**Yes**	The Agile Mind Mathematics 8 program assesses grade-level content. In addition, teachers can easily include or omit items from homework assignments and topic quizzes within the Agile Mind system to differentiate instruction for students.

[5] For more on the major work of the grade, see Focus by Grade Level.
[6] The materials should devote at least 65% and up to approximately 85% of class time to the major work of the grade with Grades K–2 nearer the upper end of that range, i.e., 85%.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
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 the major content to the supporting content in 8th grade (8.NS.A and 8.SP.A). Topic 2, Block 10, Problem 4 meaningfully connects 8.NS.A2 to 8.EE.A2. Topic 9, Block 4 connects 8.SP.A to 8.F.B.4.
	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**	In Topics 8 and 9, the materials connect students' work with functions to their work with expressions and equations and their work with statistics. These connections will help students continue to develop their understanding and skills associated with functions which will have a great impact on their success in Algebra I.
Non-Negotiable **3. RIGOR AND BALANCE:** Each grade's instructional materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application. ☒ Yes ☐ No	**REQUIRED** **3a)** ***Attention to Conceptual Understanding:*** Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and discussion questions.	**Yes**	The materials consistently devote ample time to developing students' understanding of key mathematical concepts that are introduced in 8th grade. For example, in Topic 7: Linear Patterns and Functions, students are not merely provided a definition of a function and asked to identify which graphs are and are not functions (as is the traditional approach to learning functions); rather, students get to explore linear relationships as a means of developing their understanding of a predictable situation that follows some rule (i.e., a function). This understanding of a function is deepened throughout this Topic and the next allowing ensuring that students have ample opportunities to grasp the concept of a function and then later apply their understanding to solve problems and real world applications.
	REQUIRED **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with	**Yes**	In grade 8, students must build on their fluency with solving two-step equations from grade 7 to solve more complex linear equations. In Topic 11, Solving linear equations, students complete practice problems, both in the online assessment components and in the Student Activity Sheets to strength student fluency in solving equations with variables on both sides of the equation.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	algebraic operations is provided in order for students to have the foundation for later work in algebra.		Students continue demonstrating fluency with solving equations in Topic 13, Other methods for solving systems, where students reinforce their work with single equations as they solve systems of two linear equations. Students also build fluency with exponents. In Topic 3, Laws of exponents and scientific notation, students again are given ample opportunities to develop fluency with the online assessment and the printable Student Activity Sheets.
	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**	Through using these materials, students are continually pushed to apply their knowledge and skills to the real world through problems and tasks. More Blocks than not incorporate context allowing students to readily see that what they are learning can be used in the real world. Additionally, the materials seamlessly integrate the tasks from the Mathematics Assessment Resource Service (MARS) collection of tasks. Again, the majority of these tasks require students to connect their developing understanding and skills to a real-world context.
	REQUIRED **3d) *Balance:*** The three aspects of rigor are not always treated together and are not always treated separately.	**Yes**	Appropriate rigor and balance of conceptual understanding, procedural skill and fluency, and application are key aspects to the Agile Mind Mathematics 8 program. A fundamental design principle is to engage students with mathematics through an application, to decontextualize the content to develop conceptual understanding with powerful visualizations and interactions, and to provide rich opportunities for practice and assessment. A clear example of the balance of the aspects of rigor can be seen in Topic 11 Solving linear equations. The Overview of the topic presents a

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			rental scenario that motivates the need to solve a linear equation. The Explorings in the topic present various solution methods for solving linear equations, including graphing, using tables, and algebraic methods. The instructional components develop a conceptual understanding of solving equations that arises from linear function models of situations. The topic provides ample opportunity for students to practice solving equations, both in contextual situations and purely mathematical equations. The three Constructed response questions in this topic also provide a balance of application problems and problems that assess conceptual understanding.
Non-Negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards. ☒ Yes ☐ No	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in both teacher and student materials.	**Yes**	It is clear that the Standards for Mathematical Practice greatly influenced the creation of this curriculum. Students are frequently presented with challenging problems for which they have to make sense and persevere in solving them. Additionally, the materials present students with multiple models of mathematical concepts and expect the students in turn to use various models in their thinking and problem solving. The materials also afford students opportunities to develop their conceptual understanding of key math concepts through asking students to look for and makes use of structure and repeated reasoning.
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion **5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:** Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in	**REQUIRED** **5a)** Materials provide all students extensive work with course-level problems. Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.	**Yes**	Each topic in the Agile Mind Mathematics 8 program consists of instructional content, embedded formative assessment, practice, and topic-level assessments. In the practice and topic-level assessment components alone, each topic has at least 35 online questions. In addition, offline Student Activity Sheets provide additional opportunities to solve problems, including "Review" and "Reinforce" questions so that students can review content from a previous grade or from earlier in the course as well as reinforce grade-level

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
the Standards. ☒ Yes ☐ No			content. The Advice for instruction for each topic contains a section listing the prerequisite skills students will need to be successful with the grade-level content.
	REQUIRED **5b)** Materials relate course-level concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.	**Yes**	A design principle of the Mathematics 8 program is "just-in-time" review of content, which enables students to review knowledge from earlier grades or courses in the context of learning new, on grade-level content. For example, in Topic 2 Real numbers, the Overview reviews the set of rational numbers from previous grades before introducing irrational numbers. In Topic 11, Solving linear equations, students review solving simple two-step equations from grade 7 before moving on to solving more complex linear equations, including equations with variables on both sides of the equal sign. In Topic 15 Cylinders, cones, and spheres, students use their knowledge of prisms to understand the surface area and volume of a cylinder.
	5c) Materials base content progressions on the progressions in the Standards.	**Yes**	The Agile Mind mathematics programs from grade 6 through high school are designed as a vertical suite. The progression of conceptual learning across the grades presented in the standards is mirrored in the programs. Within the Mathematics 8 program, the course begins with transformations of the plane. Defining similarity as a dilation early in the course allows students to use similarity as they explore the Pythagorean Theorem and slope, as required by the standards. Students are introduced to irrational numbers just before they need to use them to solve problems with the Pythagorean Theorem. Students explore the properties of integer exponents, thus expanding their ability to transform expressions.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			This work, coupled with their work with square root and cube root symbols, lays the foundation for work with rational exponents in high school. Students build on their work with proportional relationships from grade 7 as they understand rate of change in a variety of contexts. Then the rate of change is used to define the slope of a line. Once students have confidence in using linear equations to model situations, student solve linear equations that arise from these situations. Students' work with bivariate data connects to their work with linear functions and also foreshadows their deeper work with bivariate categorical data in high school. Students begin an investigation of systems of linear equations, setting the stage for further work in high school. Their work with geometric relationships builds on the measurement ideas developed in grades 6 and 7 but also sets the stage for the more formal work of high school geometry.
	5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings and/or standards.	**Yes**	Each topic has specific support for the teacher in the Advice for Instruction component. Within this component, goals and objectives are identified in each topic's Prepare instruction section. The learning objectives have clear ties to the standards and cluster headings.
	5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.	**Yes**	The Agile Mind Mathematics 8 program is a standards-based curriculum with guidance taken from the critical areas defined by the standards and the major cluster work. The majority of time in the course is spent on major cluster work. Connections are made throughout the course to maintain coherence. In addition, connections to prior work are made explicit in the materials. A balance of the three aspects of rigor is evident throughout the program, as described in indicator 3d above. For example, students formalize the concept of

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			slope in Topic 8, Understanding slope and y-intercept, building on their understanding of rate of change, and laying the foundation for work with linear functions, equations, and systems of equations.
Additional Criterion **6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:** Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards. ☒ Yes ☐ No	**REQUIRED** **6a)** Materials attend to the full meaning of each practice standard. Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard. Alignments to practice standards are accurate.	**Yes**	Throughout the programs the materials provide students with ongoing opportunities to develop and demonstrate proficiency with the practice standards, through interactive animations, simulations, extended explorations, and next-generation assessments. For example, in Topic 2 Real numbers, Exploring "Rational numbers and decimals," students use a series of animations to look for and make use of structure as they explore one method on how to convert repeating decimals to fractions. In Topic 8 Understanding slope and y-intercept, Exploring "Connecting representations," students reason abstractly and quantitatively as they represent a savings situation in multiple ways and interpret the meaning of the slope and y-intercept. In Topic 14 Exploring geometric relationships, Constructed response 1, students have the opportunity to construct viable arguments and critique the reasoning of others while they present to the class and explain why a periscope works using what they know about angles and parallel lines. MARS tasks appear throughout the course to provide rich problem-solving opportunities that promote student engagement in multiple practices. Additional examples of the program's treatment of the practice standards can be found on a dedicated, Practice Standards Connections page in the Professional Support section for educators.
	REQUIRED	**Yes**	Throughout the program are embedded tasks that

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	6b) Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics that is detailed in the content standards (cf. MP.3). Materials engage students in problem solving as a form of argument, attending thoroughly to places in the Standards that explicitly set expectations for multi-step problems.		require students to develop ideas and defend their thinking to peers. In addition to instructional content that prompts mathematical argumentation, multi-step problems such as Constructed response questions and MARS tasks often require students to construct viable arguments and critique the reasoning of their classmates. The Advice for Instruction also provides teachers with guidance on promoting this practice throughout the course. Examples of specific support for this practice standard can be found in the Practice Standards Connections page of Professional Support. In Topic 5, Analyzing graphs, Constructed response page 2 asks students to interpret graphs and draw conclusions. The related Advice for Instruction in Block 6 advises teachers to have students work in groups to present their arguments and then to respond to the arguments of their classmates. Topic 14, Exploring geometric relationships, Constructed response page 1 also provides students with an opportunity to construct a viable argument for the relationship between two angles in a given situation. Throughout the course, the Advice for instruction, Deliver instruction component gives teachers advice on promoting this practice throughout the course. Examples of specific teacher support can be found in the following topics: Topic 2 Real numbers, Deliver instruction Blocks 2, 7, and 11 Topic 4 Pythagorean Theorem, Deliver instruction Blocks 3 and 4 Topic 5 Analyzing graphs, Deliver instruction Blocks 4, 5, and 6 Topic 14 Exploring geometric relationships, Deliver instruction Block 2

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	6c) There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.	**Yes**	As communicated directly to teachers in the online "Practice Standards Connections" section in the Professional Support area, the practice standards have a central role in instruction: they represent the natural ways in which students come to understand and do mathematics. This dedicated page also provides numerous examples throughout the course related to each practice standard. The role of the practice standards is also communicated directly to teachers through the Advice for Instruction that accompanies each topic by connecting the practices to specific mathematical content. The Advice for Instruction provides detailed lesson guidance for teachers, including page-by-page advice for facilitating content explorations and probing, scaffolding, and extension questions to promote appropriate or useful mathematical practices. In particular, the Advice for Instruction for MARS tasks gives teachers explicit guidance in how to help their students develop proficiency with the math practices so that students are equipped to continue to demonstrate the practice standards as they engage with the mathematical content throughout the course. For example, Topic 12 Formulating and solving systems, Block 6 provides explicit guidance to teachers in support of several practice standards: Make sense of problems and persevere in solving them; Reason abstractly and quantitatively; Construct viable arguments and critique the reasoning of others; and Model with mathematics.
	6d) Materials explicitly attend to the specialized language of mathematics.	**Yes**	Precise mathematical language and notation is used throughout the Agile Mind Mathematics 8 program. The instructional components model precise language and help students make sense of new terms. The Advice for Instruction gives support to teachers for encouraging students to use precise language, including a Language support section that calls out key vocabulary within the topic. Language

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			strategies in the page-by-page lesson advice provide guidance for teachers to engage students in mathematical language in appropriate ways.
Additional Criterion **7. INDICATORS OF QUALITY:** Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards. ☒ Yes ☐ No	**REQUIRED** **7a)** There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.	**Yes**	Throughout the Agile Mind course programs, students engage in mathematics in a variety of ways and produce a variety of types of work. In addition to extensive opportunities in the online system to engage in a variety of problem-solving situations and assessment items types, students use Student Activity Sheets (SAS) to record their thinking and problem solving, review prior knowledge, and reinforce new learning. Constructed response items in each topic provide opportunities for students to express their understanding in a variety of ways. Examples include: Topic 2, Real numbers, Constructed response page 3 presents students with literacy tasks that give an opportunity for students to present well-written verbal responses. In Topic 4 Pythagorean Theorem, students justify the Pythagorean Theorem using visual images and Patty Paper. Topic 5 Analyzing graphs, Constructed response pages 1 and 3 ask students to create graphs, interpret graphs, and justify their reasoning. In Topic 8 Understanding slope and y-intercept, students sketch graphs given situations, describe situations given graphs, write function rules, and explain their reasoning (see SAS sheets). Constructed response page 2 in this topic also has students design a staircase (part b). In Topic 9 Exploring bivariate data, students create scatterplots, draw trend lines, create equations for trend lines, and describe relationships between variables. The Constructed response questions also

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			provide opportunities for students to express their understanding of linear models in a variety of ways.
	REQUIRED **7b)** There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students' responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.	**Yes**	The professional tools and support within Agile Mind equip teachers with Dana Center-designed strategies and methods for engagement, review, discussion, exploration of multiple solution paths, and practice with new content, as well as with continuing opportunities to develop mastery. The Scope and Sequence and Advice for Instruction for teachers and other resources in the Professional Support section contain multiple types of lesson guidance, including high-level planning and organization support, sequencing support, goals and objectives, and information that helps teachers situate the mathematics students are learning in the overall landscape of the mathematics of the grade and of prior and future courses. Detailed, page-by-page lesson advice provides guidance for facilitating content explorations and probing, scaffolding, and extension questions to elevate teacher-student interactions beyond simple "question and answer" routines. The professional support is designed to inform teachers of key concepts being introduced on each page and provides strategies for teaching in the classroom. It includes language and literacy supports, suggestions for opening the lesson, framing questions, and detailed lesson activities. Proven instructional principles embedded in the content support educators day-to-day as they continuously refine their skills and implement exemplary teaching practices.
	7c) Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. The language in which problems are posed is carefully considered.	**Yes**	The Mathematics 8 program embeds an array of rich supports for English Language learners and other hesitant learners. The instructional content, assessment, advice, and progress-monitoring resources ensure that all

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			students can benefit from evidence-based, standards-aligned curricula and instruction and help identify those at risk. The program helps scaffold student learning towards mastery of rigorous content by enabling students to interact with the content at many levels. Agile Mind structures all of the resources so that both the program and the teacher can provide multiple pathways for learners. The assessment tools and content make data about student behavior—including performance on assigned tasks and assessment items—available to teachers in real time. Having access to data supports rapid diagnosis of challenges and opportunities and thereby authentic personalization, and to address differences in learning needs early. Students have access to the same curriculum content and structure of information that teachers present to them in class—both before and after instruction—enabling them to engage and re-engage with the content at their own pace. Whether students engage on their own or with the support of others outside the classroom, their classroom experience is completely supported and reinforced—in vivid imagery, in puzzles, in problems, and in instructional material. The embedded Advice for Instruction includes guidance for teachers on how to best facilitate text-based content to support students in developing their academic literacy skills. Specific strategies, such as teacher or student think-alouds, read-pair-shares, and paired readings are recommended strategically throughout the course. Additionally, in the Advice for Instruction for each topic, the Prepare instruction planning resource includes a “Language Support” section, which presents new vocabulary. When a word has multiple meanings or there are potential misconceptions, a “Language note” may be included in the instructional content to help the teacher and students focus specifically on those

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			words and to support the transition to academic language, In addition, an extensive glossary of key mathematical terms is provided in both Spanish and English.
	7d) The underlying design of the materials distinguishes between problems and exercises. In essence the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.	**Yes**	The underlying design of the Agile Mind Math 8 program is to first engage students in solving problems to motivate learning and develop mathematical understanding. The program then provides a variety of exercises, both in and out of context, that allow students to apply what they have learned.
	7e) Lessons are appropriately structured and scaffolded to support student mastery.	**Yes**	In the Agile Mind Mathematics 8 program, teachers enact and sustain rigorous, well-scaffolded instruction and practice that ensure academic success. Each lesson in the program builds on prior knowledge, which is then used to build conceptual understanding. Each topic opens with an Overview that introduces the mathematics of the topic with animations, simulations, and real-world scenarios. The Overview serves as a launch for deeper study—students do not “pass” or “fail” but rather engage in scenarios designed to capture their interest and make them want to learn more about the mathematical ideas contained in the topic. Approaching concepts in the context of the real world engages students to build a strong foundational understanding, to retain knowledge longer, and to work toward mastery faster. Visualizations help students learn concepts more efficiently and more deeply. Explorings offer overarching questions to drive student inquiry, help students make connections, and support the development of deep understanding. Guiding questions embedded throughout the topic enable teachers to further build students’ conceptual understanding as they evaluate evidence and revise their thinking. The

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			ongoing use of interactive animations of key concepts and interactive problem solving further instills in students the engagement, persistence, and consistency of learning practices to succeed. Students master and apply the key concepts and skills to represent problem situations, typically employing multiple representations of concepts to help all learners find entry points to content, make connections among ideas, and achieve mastery of concepts and skills. The instructional components include text, illustrations, tables, graphs, and animations and encompass every major concept in the course. Teachers use them to support the enactment of instruction, and students can use the materials for review on their own; thereby extending the instructional experience beyond class.
	7f) Materials support the uses of technology as called for in the Standards.	**Yes**	Technology is an integral part of the Agile Mind course programs. Dynamic animations are a signature use of technology in the materials. Used throughout the topics in the Math 8 program, these animations enable students to build conceptual understanding by visualizing the results of varying assumptions, exploring consequences, and comparing predictions with data. In addition, each topic includes novel, technology-enhanced items for formative assessment. Other technology tools are used to enhance student learning, as students learn to make use of technology appropriately. For example: In Topic 11, Solving linear equations, and Topic 12, Formulating and solving systems, students use graphing technology to investigate graphical solution methods. In Topic 9, Exploring bivariate data, students use graphing calculators to informally assess the fit of a straight line to data.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			In Topic 1, Transformational geometry and similarity, Block 4 Advice for Instruction includes guidance about other drawing programs that allow students to easily explore transformations.

FINAL EVALUATION

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

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

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

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

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	**Yes**	The materials focus the majority of class time on the major work of the grade. In addition, there is no assessment that holds students or teachers responsible for content that is beyond the scope of the grade.
	2. Consistent, Coherent Content	**Yes**	Supporting content supports the major work of the grade and materials feature problems and activities that combine standards that address multiple clusters and domains.
	3. Rigor and Balance	**Yes**	Materials present content both separately and together in correlation with the three aspects of rigor as required by the standard.
	4. Focus and Coherence via Practice Standards	**Yes**	Math practices and their descriptions enrich the content of the grade level.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Materials are aligned to the mathematical practices, relate prior knowledge to current topics, and represent the standards accurately.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	Materials attend to the specialized vocabulary for mathematics and align as intended to the mathematical practices, especially MP.3.
	7. Indicators of Quality	**Yes**	Materials are scaffolded to accommodate new learning, support is provided for ELL learners and special populations, and materials use technology as called for in the standards.

FINAL DECISION FOR THIS MATERIAL: **Tier I, Exemplifies quality**

Appendix I.

Publisher Response

The publisher had no response.

Appendix II.

Public Comments

There were no public comments submitted.