Kiddom, Inc.

English Mathematics, 6

Kiddom Texas Math: 6th Grade

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Full-Subject, Tier-1	**9798901105412**	**Both Print and Digital**	**Static**

Rating Overview

TEKS SCORE	ELPS SCORE	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
67.8%	100%	11	Flags Addressed	Flags in Report	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	22 out of 28	79%
2. Progress Monitoring	24 out of 26	92%
3. Supports for All Learners	23 out of 27	85%
4. Depth and Coherence of Key Concepts	16 out of 19	84%
5. Balance of Conceptual and Procedural Understanding	37 out of 41	90%
6. Productive Struggle	22 out of 22	100%

Breakdown by Suitability Noncompliance and Excellence Categories

SUITABILITY NONCOMPLIANCE FLAGS BY CATEGORY	IMRA REVIEWERS	PUBLIC	Flags NOT Addressed by November Vote
1. Prohibition on Common Core	10	0	0
2. Alignment with Public Education's Constitutional Goal	0	0	0
3. Parental Rights and Responsibilities	0	0	0
4. Prohibition on Forced Political Activity	0	0	0
5. Protecting Children's Innocence	0	0	0
6. Promoting Sexual Risk Avoidance	0	0	0
7. Compliance with the Children's Internet Protection Act (CIPA)	0	0	0

SUITABILITY EXCELLENCE FLAGS BY CATEGORY	IMRA REVIEWERS
Category 2: Alignment with Public Education's Constitutional Goal	6
Category 6: Promoting Sexual Risk Avoidance	0

IMRA Quality Report

1. Intentional Instructional Design

Materials support educators in effective implementation through intentional course and lesson-level design.

1.1 Course-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.1a	All criteria for guidance met.	4/4
1.1b	Materials do not include suggested pacing (pacing guide/calendar) for various instructional calendars (e.g., varying numbers of instructional days—165, 180, 210).	1/2
1.1c	All criteria for guidance met.	2/2
1.1d	All criteria for guidance met.	2/2
1.1e	All criteria for guidance met.	2/2
—	**TOTAL**	11/12

1.1a – Materials include a scope and sequence outlining the TEKS, ELPS, and concepts taught in the course.

The materials include a scope and sequence with 13 units that outline the alignment of the grade 6 Texas Essential Knowledge and Skills (TEKS) with correlating concepts taught in each unit through the lesson's title and the learning targets for each lesson. Each of the 13 units has specified English Language Proficiency Standards (ELPS) within the scope and sequence.

1.1b – Materials include suggested pacing (pacing guide/calendar) to support effective implementation for various instructional calendars (e.g., varying numbers of instructional days – 165, 180, 210).

The "Texas 6–8 Pacing Guide" in the "Course Overview" outlines unit numbers and titles that match the scope and sequence.

The materials currently include one pacing timeline of 32 weeks. Materials do not include various instructional calendars for districts with different scheduling needs.

1.1c – Materials include an explanation for the rationale of unit order as well as how concepts to be learned connect throughout the course.

The "Course Narrative" includes the unit order and how concepts are connected throughout the course. A brief description of each unit title highlights the concepts being introduced, with connections to previously introduced concepts clearly highlighted. For example, one part of the "Course Narrative"

states, "The unit 'Graphing Quantitative Relationships' strengthens knowledge learned in prior units and continues focusing on graphing points on the coordinate plane."

The "Course Narrative" includes a rationale for the unit order, describing how each unit is connected to previous unit learning and leads to the next unit learning.

1.1d – Materials include protocols with corresponding guidance for unit and lesson internalization.

Materials include protocols with corresponding guidance for unit and lesson internalization in the *Curriculum Study for Educators*. "Internalization protocols provide a structured way for teachers to study a unit or lesson before instruction, focusing on the 'why' behind the content."

1.1e – Materials include resources and guidance for instructional leaders to support teachers with implementing the materials as designed.

The materials include resources and guidance for instructional leaders to support teachers with implementing the materials as designed within the *Administration Implementation Guide*.

"The most effective types of support that administrators can provide to improve teacher confidence and curriculum fidelity are rooted in creating a culture of collaborative professionalism and intentional, protected structures for curriculum study—especially through Professional Learning Communities (PLCs).'included' are the key supports administrators should implement, each connected to research-backed strategies and tied to the PLC framework."

1.2 Unit-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	Materials do not include comprehensive unit overviews that provide the background content knowledge and academic vocabulary necessary to effectively teach the concepts in the unit.	0/2
1.2b	All criteria for guidance met.	2/2
—	**TOTAL**	2/4

1.2a – Materials include comprehensive unit overviews that provide the background content knowledge and academic vocabulary necessary to effectively teach the concepts in the unit.

The materials include comprehensive unit overviews titled the "Unit Narrative" that covers what concepts are taught in each unit.

The "Unit Narrative" does not provide sufficient background content knowledge and academic vocabulary to effectively support instruction of the unit concepts.

1.2b – Materials contain supports for families in both Spanish and English for each unit with suggestions on supporting the progress of their student.

Materials contain supports for families in both Spanish and English for each unit, with suggestions on supporting the progress of their student. Unit 3: "Family Support Materials" titled "Content FAQs" are available in English and include a section "What Can I Do to Support My Student at Home?"

In Unit 3, there is an audio recording within "Family Support Materials" that includes tips to support students. Materials do not contain equivalent materials available in Spanish.

1.3 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.3a	Materials do not include comprehensive, structured, detailed lesson plans required to meet the language standards of the lesson (aligned to the ELPS).	7/8
1.3b	Materials do not include a lesson overview listing the teacher and student materials necessary to effectively deliver the lesson.	1/3
1.3c	All criteria for guidance met.	1/1
—	**TOTAL**	9/12

1.3a – Materials include comprehensive, structured, detailed lesson plans that include daily objectives, questions, tasks, materials, and instructional assessments required to meet the content and language standards of the lesson (aligned with the TEKS and the ELPS).

The materials include comprehensive, structured, detailed lesson plans that include daily objectives. For example, the Unit 8, Lesson 1: "Equal and Equivalent" lesson plans are aligned to the TEKS and include daily objectives, titled "Learning Goals," aligned to those TEKS. Materials do not include comprehensive, structured, detailed lesson plans required to meet language standards of the lesson (aligned to the ELPS).

Teacher questions to check for understanding are included in the "Activity Synthesis" sections of the lesson plans. Each activity includes tasks that promote the mastery of each objective, a list of necessary materials, and an instructional assessment.

The lesson plans include supports for English Language Learners, such as "'Conversing: Clarify, Critique, Correct.' Use this routine to give students an opportunity to clarify a possible misunderstanding from the class." However, alignment with ELPS is not addressed in the lesson plans.

1.3b – Materials include a lesson overview listing the teacher and student materials necessary to effectively deliver the lesson, and the suggested timing for each lesson component.

The "Lesson Overview" includes required materials; however, the materials do not specify either teacher or student.

A presentation is included in the "Lesson Overview" with the suggested timing for each lesson component; however, the timing is not listed directly in the unit overview.

1.3c – Materials include guidance on the effective use of lesson materials for extended practice (e.g., homework, extension, enrichment).

In the *Middle School Course Guide for Teachers*, the section on practice problems states, "Each lesson includes an associated set of practice problems. Assign practice problems for homework or for extra practice in class."

The materials do not include guidance to specify practice as homework, extension, or enrichment.

2. Progress Monitoring

Materials support educators in effective implementation through frequent, strategic opportunities to monitor and respond to student progress.

2.1 Instructional Assessments

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.1a	Materials do not include a variety of instructional assessments at the unit level (including diagnostic and summative) that vary in type of task.	7/9
2.1b	All criteria for guidance met.	2/2
2.1c	All criteria for guidance met.	2/2
2.1d	All criteria for guidance met.	6/6
2.1e	All criteria for guidance met.	2/2
—	**TOTAL**	19/21

2.1a – Materials include a variety of instructional assessments at the unit and lesson level (including diagnostic, formative, and summative) that vary in types of tasks and questions.

Materials include a variety of instructional assessments at the lesson level, with tasks and questions that vary in format (e.g., grade 6, Lesson 5, "Grade 6.5.5 Cumulative Pp Set for Defining Equivalent Ratios") contains formative checks through multiple-choice and open-ended questions, as well as drawings and fill in the blank.

Materials include a variety of instructional assessments at the unit level (including diagnostic, formative, and summative). Each unit includes one or more diagnostic "Check Your Readiness" and summative "End of Unit Assessment" with varying types of questions, including multiple-choice, open-ended, and written responses.

Diagnostic and summative assessments at the unit level, which vary in types of tasks, were not found.

2.1b – Materials include the definition and intended purpose for the types of instructional assessments included.

The materials include the definition for the types of instructional assessments. In the *Middle School Course Guide for Teachers*, an "Assessment Guidance" section of the document defines each type of assessment. For diagnostic assessments, the document states, "Use these problems to identify students with particular below-grade needs, or topics to carefully address during the unit." In a section about cool-down activities, the document states, "Use this as a formative assessment to provide feedback or to plan further instruction." For summative assessments, the document states, "These assessments gauge

students' understanding of the key concepts of the unit while also preparing students for new-generation standardized exams."

The materials include the intended purpose for the types of instructional assessments included. For diagnostic assessments, the materials state, "Use these to pace or tune instruction. In rare cases, they may signal the opportunity to move more quickly through a topic to optimize instructional time." For formative assessments, the materials state, "Each lesson ends with a cool-down to formatively assess students' thinking in relation to an important math concept from the day's learning. Each cool-down is accompanied by guidance on how to continue teaching grade-level content, with appropriate and aligned practice and support for students."

2.1c – Materials include teacher guidance to ensure consistent and accurate administration of instructional assessments.

Materials include teacher guidance to ensure accurate administration of instructional assessments, as they have learning goals that are referred to multiple times in the *Middle School Course Guide for Teachers* and within each lesson.

Materials include teacher guidance to ensure consistent administration of instructional assessments. Materials, such as a teacher script or teacher directions for assessments, are found in the "Assessment Guidance."

2.1d – Diagnostic, formative, and summative assessments are aligned to the TEKS and objectives of the course, unit, or lesson.

The included diagnostic assessments are aligned to the course's TEKS and the unit's objectives. For example, in Unit 8, question two of the "Grade 6.8 Check Your Readiness (A)" diagnostic assessment is aligned to TEKS 6.7D and the unit's objective, which is found in the "Section Level Planning Guide," which states, "Apply and explain the distributive property to generate equivalent numerical and algebraic expressions."

The formative assessments included are aligned with the TEKS of the course and the objectives of the lesson. For example, in Unit 8, Lesson 5, the formative assessment activity "5.4: Cooldown—More 3's" is aligned to TEKS 6.7A and the lesson objective "Generate and evaluate numerical expressions involving whole-number exponents," found in the first section of the lesson.

Summative assessments included are aligned to the TEKS of the course and the objectives of the unit. In the "Grade 6.8 End of Unit Assessment (A)" summative assessment, questions are aligned to TEKS 6.7A, 6.7C, and 6.7D, and are also aligned to the unit objectives found in the "Section Level Planning Guide."

2.1e – Instructional assessments include TEKS-aligned items at varying levels of complexity.

Instructional assessments include TEKS-aligned items at varying levels of complexity. For example, in the "Grade 6.2 End of Unit Assessment (A)" summative assessment, Questions 1, 4 Part A, and 4 Part B are all asked at different levels of complexity.

Another example of instructional assessments that include TEKS-aligned items at varying levels of complexity is found within "Grade 6.1.5 Cumulative Pp Set for Using Common Multiples and Common Factors," where there are varying levels of complexity within each multi-part question.

2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	All criteria for guidance met.	2/2
2.2b	All criteria for guidance met.	1/1
2.2c	All criteria for guidance met.	2/2
—	**TOTAL**	5/5

2.2a – Instructional assessments and scoring information provide guidance for interpreting student performance.

Instructional assessments and scoring information provide guidance for interpreting student performance. In the "Grade 6.9 End of Unit Assessment(A)," notes for evaluating responses, seen throughout the assessment, give the teacher guidance on why students may have answered questions in certain ways and what to look for on student work pages to ensure skill mastery for different types of questions.

Another example of guidance for interpreting student performance is found within the questions. For example, Question 1 in "Activity 4.3: Writing Equivalent Expressions Using the Distributive Property" includes a point value for scoring information, and each formative assessment item has a "Note for Evaluating Responses."

2.2b – Materials provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments.

Materials provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments by providing a list of strategies a teacher could use if "a large number of students" cannot complete the same pre-unit assessment problem.

Another example of guidance for the use of included tasks and activities to respond to student trends in performance on assessments is found in pre-assessments. Under Question 2, Part B within "Grade 6.2 Check Your Readiness (A)," there is teacher guidance: "If most students struggle with this item, plan to use Lesson 2 to support students in representing and reasoning about multiplication and division situations."

2.2c – Materials include tools for teachers to track student progress and growth, and tools for students to track their own progress and growth.

Materials include tools for teachers to track student progress and growth, and tools for students to track their own progress and growth. Teachers and students have a "Class Standard Mastery" report, and students can check their progress weekly or monthly.

Additional information regarding tracking student progress and growth can be found on the Support Site. The article "What Insights Do My Reports Offer?" describes tools given to teachers and states, "The Reports help monitor student progress over time, track growth by mastery level, and analyze both class and student performance on individual standards." For students, the article "What Do My Reports Mean?," states, "The Reports feature . . . allows you to track your performance in each class based on standards and assignments."

3. Supports for All Learners

Materials support educators in reaching all learners through design focused on engagement, representation, and action/expression for learner variability.

3.1 Differentiation and Scaffolds

Guidance marked with a (T) refers to teacher-facing components. Guidance with an (S) refers to student-facing components.

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.1a	All criteria for guidance met.	3/3
3.1b	All criteria for guidance met.	2/2
3.1c	All criteria for guidance met.	2/2
—	**TOTAL**	7/7

3.1a – Materials include teacher guidance for differentiated instruction, activities, and paired (scaffolded) lessons for students who have not yet reached proficiency on grade-level content and skills.

Materials include teacher guidance for differentiated instruction, activities, and paired (scaffolded) lessons for students who have not yet reached proficiency on grade-level content and skills. For example, instructions and activities can be found below Question 1 within "Grade 6.3 Check Your Readiness (A)," which states, "The content in this problem is first addressed in Lesson 1: Tiling the Plane. Students have studied the area of rectangles in both Grade 3 and Grade 5. If students struggle with this problem, consider spending additional time during the synthesis of Lesson 1 discussing what area is and how it is calculated for rectangles."

Another example from the grade 6, Unit 6, 2.2: "Measurement Stations" in the "Anticipated Misconceptions" section, which instructs teachers how to respond to student misconceptions throughout the activity: "Students may answer 3 milliliters for the question about 15 teaspoons because they divided by 5 instead of multiplying by 5. Encourage them to pay attention to which unit is bigger and ask what that tells them about which numerical value should be larger."

3.1b – Materials include pre-teaching or embedded supports for unfamiliar vocabulary and references in text (e.g., figurative language, idioms, academic language). (T/S)

Materials include pre-teaching or embedded supports for unfamiliar vocabulary and references in text (e.g., figurative language, idioms, academic language). The *Middle School Course Guide for Teachers* states, "Visual aids, such as images, diagrams, vocabulary anchor charts, color coding, or physical demonstrations, are suggested throughout the materials to support conceptual processing and language development."

The grade 6 activity, "3.2: Making a Banner," includes a "Support for Students with Disabilities" section of the lesson, which states, "Activate or supply background knowledge. Remind students that they can draw rectangle diagrams to help them determine the missing values." This statement refers to a word problem about banners, supporting students with knowledge about what shape a banner would be.

3.1c – Materials include teacher guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skill.

Materials include teacher guidance for enrichment and extension activities for students who have demonstrated proficiency in grade-level content and skill. For example, some activities include problems titled "Are You Ready for More?" The *Middle School Course Guide for Teachers* references these problems and states, "These problems go deeper into grade-level mathematics, and often make connections between the topic at hand and other concepts."

The *Teacher Resource Guide* includes a section explaining the contents of a math lesson, including the sections "Instructional Activities" and "Instructional Routines," where descriptions of what teachers are guided to do for students on-level, below-level, and above-level.

3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	All criteria for guidance met.	4/4
3.2b	All criteria for guidance met.	2/2
3.2c	All criteria for guidance met.	3/3
—	**TOTAL**	9/9

3.2a – Materials include explicit (direct) prompts and guidance to support the teacher in modeling and explaining the concept(s) to be learned.

Materials include explicit (direct) prompts and guidance to support the teacher in modeling and explaining the concept(s) to be learned. For example, Instructional Routines are outlined in the *Middle School Course Guide for Teachers* to engage students in mathematical conversations. The information included ranges from "How to Prepare for and Conduct the Modeling Lesson or Project" to "Ideas for Setting up an Environment Conducive to Modeling," and tools that could be useful for students. Question prompts are also given in the guide to assist in engaging students with the process, such as "What pictures, diagrams, graphs, or equations might help people understand the relationship between the quantities?"

Another example of explicit (direct) prompts and guidance to support the teacher in modeling and explaining the concepts(s) to be learned can be found within the lessons. In Unit 5, Lesson 7, "7.3: Art Paste on a Double Number Line," the launch section guides teachers through what to say to students when starting the lesson. For example, the following prompt is given in a lesson over double number lines: "You just used a double number line to solve some problems. Now, you'll create a double number line from scratch. Once you know how to make double number lines, you can use them for any situation with equivalent ratios."

3.2b – Materials include teacher guidance and recommendations for effective lesson delivery and facilitation using a variety of instructional approaches.

Materials include teacher guidance and recommendations for effective lesson delivery and facilitation using a variety of instructional approaches. In the *Middle School Course Guide for Teachers*, guidance for effective lesson delivery and facilitation using a variety of instructional approaches is provided. For example, in a section on student work time, the guide states, "The launch of an activity frequently includes suggestions for grouping students. At different times, students are given opportunities to work individually, with a partner, and in small groups."

Additional examples are present in each lesson, such as Unit 4, Lesson 2, "2.3: Finding Sums in Different Ways," where guidance and recommendations for lesson delivery are provided. "Focus the whole-class debriefing on the idea of choosing appropriate tools to solve a problem, which is an important part of

doing mathematics. Highlight how drawings, such as number lines, can effectively help us understand what is happening when we add base-ten numbers before moving on to a more generalized method." The same lesson also gives guidance and recommendations for facilitation of the lesson; instructing teachers to have base-ten blocks, paper printouts of base-ten blocks, or digital base-ten blocks, and informs teachers of groupings and then whole-class guided discussion questions during the Activity Synthesis.

3.2c – Materials support multiple types of practice (e.g., guided, independent, collaborative) and include guidance for teachers and recommended structures (e.g., whole group, small group, individual) to support effective implementation.

Materials support multiple types of practice (e.g., guided, independent, and collaborative) and include support for teachers and recommended structures (e.g., whole group, small group, and individual) to support effective implementation. The *Middle School Course Guide for Teachers* mentions the launch for supporting teachers and giving suggestions on whether an activity should be individual or grouped. For example, in a section on student work time, the guide states, "The launch of an activity frequently includes suggestions for grouping students. At different times, students are given opportunities to work individually, with a partner, and in small groups."

Materials support multiple types of practice (e.g., guided, independent, and collaborative) and include guidance for teachers and recommended structures (e.g., whole group, small group, and individual) to support effective implementation. Materials include instructional routines with clear headings and descriptions to help the teacher effectively implement recommended structures. For example, in grade 6, Unit 3, Lesson 4, Activity 2, the "Launch" states "Arrange students in groups of 2–4. Ask students to find the area of the parallelogram," then proceed to provide "Quiet Think Time (5 minutes)," and "Group Discussion" with students justifying responses to their peers.

3.3 Support for Emergent Bilingual Students

An emergent bilingual student is a student who is in the process of acquiring English and has another language as the primary language. The term emergent bilingual student replaced the term English learner in the Texas Education Code 29, Subchapter B after the September 1, 2021 update. Some instructional materials still use English language learner or English learner and these terms have been retained in direct quotations and titles.

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.3a	Materials do not include teacher guidance on providing linguistic accommodations for various levels of language proficiency, [as defined by the ELPS), which are designed to engage students in using increasingly academic language.	0/2
3.3b	All criteria for guidance met.	1/1
3.3c	Materials do not include making cross-linguistic connections through oral and written discourse.	6/8
3.3d	This guidance is not applicable to the program.	N/A
—	**TOTAL**	7/11

3.3a – Materials include teacher guidance on providing linguistic accommodations for various levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language.

Materials do not include teacher guidance on providing linguistic accommodations for various levels of proficiency as defined by the ELPS, which are designed to engage students in using increasingly more academic language. The various levels of proficiency (Pre-production, Beginning, Intermediate, High intermediate, and Advanced) are not identified or used throughout the materials.

3.3b – Materials include implementation guidance to support teachers in effectively using the materials in state-approved bilingual/ESL programs.

The materials include implementation guidance for teachers in using the materials in a state-approved English as a Second Language (ESL) program. "The Course Overview" includes "Eight Mathematical Language Routines."

3.3c – Materials include embedded guidance for teachers to support emergent bilingual students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through oral and written discourse.

Materials include embedded guidance for teachers to support emergent bilingual students in developing academic vocabulary, increasing comprehension, and building background knowledge through oral and written discourse. The *Middle School Course Guide for Teachers* includes Mathematical Language Routines (MLRs), which "are instructional routines that provide structured but adaptable formats for amplifying, assessing, and developing students' language." The MLRs included in this curriculum were selected because they simultaneously support students' learning of mathematical practices, content, and language. They are particularly well-suited to meet the needs of linguistically and culturally diverse students who are learning mathematics while concurrently acquiring English. The resource guide also states, "Use the optional, suggested MLRs to support access and language development for English Learners, based on the language demands students will encounter. They are described in the Activity Narrative, under the heading 'Access for English Learners.' Use the suggested MLRs and language strategies, as appropriate, to provide students with access to an activity, without reducing the mathematical demands of the task."

The grade 6, Unit 1, Lesson 3, "Activity 3.3: Greatest Common Factor," guides teachers in supporting the development of academic vocabulary and the building of background knowledge through oral and written discourse with the language routine, "Speaking, Listening, Writing: MLR1 Stronger and Clearer Each Time."

The materials do not include embedded guidance for teachers to support emergent bilingual students in making cross-linguistic connections through oral and written discourse.

3.3d – If designed for dual language immersion (DLI) programs, materials include resources that outline opportunities to address metalinguistic transfer from English to the partner language.

This guidance is not applicable because the program is not designed for dual language immersion (DLI) programs.

4. Depth and Coherence of Key Concepts

Materials are designed to meet the rigor of the standards while connecting concepts within and across grade levels/courses.

4.1 Depth of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.1a	All criteria for guidance met.	2/2
4.1b	All criteria for guidance met.	1/1
—	**TOTAL**	3/3

4.1a – Practice opportunities over the course of a lesson and/or unit (including instructional assessments) require students to demonstrate depth of understanding aligned to the TEKS.

Practice opportunities over the course of a lesson require students to demonstrate depth of understanding aligned to the TEKS. The resource cites that the lesson level Cumulative Pp Sets are for practice or homework. In the "Grade 6.7.5 Cumulative Pp Set for Ordering Rational Numbers" document, questions are aligned to the depth of understanding of TEKS 6.2D.

Instructional assessments provide practice opportunities over the course of a unit that require students to demonstrate depth of understanding aligned to the TEKS. For example, the "Grade 6.8 End of Unit Assessment (A)" is aligned to TEKS 6.7A, 6.7C, and 6.7D and includes a variety of questions that cover the range of the TEKS.

4.1b – Questions and tasks progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics TEKS.

Questions and tasks progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics TEKS. For example, the level of rigor and complexity found in warm-ups, cooldowns, activities, and cumulative practice problems within a lesson asks students to apply their knowledge in a situation later in the lesson and not at the beginning of the lesson.

The *Middle School Course Guide for Teachers* gives examples of different tasks that can be seen at the lesson level. The document also explains the progressive increase in rigor and complexity and states, "The initial lesson in a unit activates prior knowledge and provides an easy entry point to new concepts, so that students at different levels of both mathematical and English language proficiency engage productively in the work. As the unit progresses, students are systematically introduced to representations, contexts, concepts, language, and notation. As their learning progresses, they make connections between different representations and strategies, consolidating their conceptual understanding, and see and understand more efficient methods of solving problems, supporting the shift toward procedural fluency."

4.2 Coherence of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.2a	All criteria for guidance met.	1/1
4.2b	Materials do not demonstrate coherence across units by connecting the content and language learned in previous courses and grade levels and what will be learned in future courses and grade levels to the content to be learned in the current course and grade level.	0/3
4.2c	All criteria for guidance met.	4/4
—	**TOTAL**	5/8

4.2a – Materials demonstrate coherence across units by explicitly connecting patterns, big ideas, and relationships between mathematical concepts.

Materials demonstrate coherence across units by explicitly connecting patterns, big ideas, and relationships between mathematical concepts. In the "Course Narrative," one section states, "In addition, these units will connect ratios and rates back to fractions and decimals, and apply them to real-life contexts such as discounts, tax, and unit conversions," showing coherence across multiple units such as "Ratios," "Percents, Unit Rates, and Conversions," "Decimals," and "Positive Rational Numbers."

Materials demonstrate coherence across units by explicitly connecting patterns, big ideas, and relationships between mathematical concepts. For example, within the grade 6 scope and sequence, tape diagrams are used to model division in Unit 2, in Unit 5 to model part-to-part ratios, in Unit 6 to represent percentages, and again in Unit 9 to represent equations.

4.2b – Materials demonstrate coherence across units by connecting the content and language learned in previous courses/grade levels and what will be learned in future courses/grade levels to the content to be learned in the current course/grade level.

Evidence not found. Materials do not demonstrate coherence across units by connecting the content and language learned in previous courses and grade levels and what will be learned in future courses and grade levels to the content to be learned in the current course and grade level.

4.2c – Materials demonstrate coherence at the lesson level by connecting students' prior knowledge of concepts and procedures from the current and prior grade level(s) to new mathematical knowledge and skills.

Materials demonstrate coherence at the lesson level by connecting students' prior knowledge of concepts and procedures from the current to new mathematical knowledge and skills. In Unit 4, Lesson 3, the narrative states, "In earlier grades, students used the area of rectangles to represent and find

products of whole numbers and fractions. Here, they do the same to represent and find products of decimals."

Additional evidence of lesson-level coherence, connecting students' prior knowledge of concepts and procedures from previous grade levels to new mathematical knowledge and skills, can be found in the *Middle School Course Guide for Teachers*, which states, "As their learning progresses, students make connections between different representations and the concepts and procedures they show," after giving specific examples of content and procedures from prior knowledge.

4.3 Coherence and Variety of Practice

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.3a	All criteria for guidance met.	4/4
4.3b	All criteria for guidance met.	4/4
—	**TOTAL**	8/8

4.3a – Materials provide spaced retrieval opportunities with previously learned skills and concepts across lessons and units.

Materials provide spaced retrieval opportunities with previously learned skills and concepts across lessons and units. For example, in the "Launch" section of Unit 5, "Lessons 7–7.2: Just a Little Green," teacher instructions are given to "Ask students to recall what double number lines are and how they can be used to represent problems involving equivalent ratios," showing a spaced retrieval opportunity with previously learned skills and concepts across lessons.

Additionally, materials provide spaced retrieval opportunities with previously learned skills and concepts across units within the questioning of the Check your Readiness diagnostic at the beginning of each unit. For example, the statement "The content assessed in this problem is first encountered in Lesson 5: Meaning of Exponents" is in the grade 6, Unit 8 diagnostic assessment.

Materials provide spaced retrieval opportunities with previously learned skills and concepts across lessons within the "Lesson Narrative" section inside each lesson. For example, in Unit 4, Lesson 2, it states, "Prior to grade 6, students have added and subtracted decimals to the hundredths using a variety of methods . . ."

4.3b – Materials provide interleaved practice opportunities with previously learned skills and concepts across lessons and units.

Materials provide interleaved practice opportunities with previously learned skills and concepts across learning pathways as seen in the set of practice problems associated with each lesson, which include a few questions about the contents of that lesson, plus additional problems that review material from earlier in the unit and previous units.

Materials provide interleaved practice opportunities with previously learned skills and concepts across lessons and units. The Cumulative Pp Sets integrate lesson-specific content with previously learned skills and concepts. For example, in the "Grade 6.4.3 Cumulative Pp Set for Methods for Multiplying Decimals," apart from multiplying decimals, the practice problem set also has questions about calculating the sum or difference of decimals from a previous lesson in the unit, finding the area of a composite shape by composing or decomposing from Unit 3, and division of fractions from Unit 2.

5. Balance of Conceptual and Procedural Understanding

Materials are designed to balance conceptual understanding, procedural skills, and fluency.

5.1 Development of Conceptual Understanding

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.1a	All criteria for guidance met.	3/3
5.1b	All criteria for guidance met.	1/1
5.1c	All criteria for guidance met.	1/1
—	**TOTAL**	5/5

5.1a – Questions and tasks require students to interpret, analyze, and evaluate models and representations for mathematical concepts and situations.

Questions and tasks require students to interpret, analyze, and evaluate models and representations for mathematical concepts and situations. For example, in grade 6, Unit 9, "Activity 1.2: Match Equations and Tape Diagrams" on equations, students interpret and analyze the models given, and teachers receive guiding questions to ask students, such as, "How can you tell if a diagram represents addition or multiplication?" and, "Regarding any two equations that represent the same diagram: What is the same about the equations? What is different?"

The *Middle School Course Guide for Teachers* provides guidance on questions and tasks that require students to interpret, analyze, and evaluate models and representations for mathematical concepts and situations.

The *Middle School Course Guide for Teachers* provides information related to Mathematical Modeling Prompts for teachers to use when students are engaged in interpreting, analyzing, and evaluating models and representations for mathematical concepts and situations.

5.1b – Questions and tasks require students to create models to represent mathematical situations.

Questions and tasks require students to create models to represent mathematical situations. For example, in "Activity 6.2 Drink Mix on a Double Number Line," students represent ratios on double number lines.

Questions and tasks require students to create models to represent mathematical situations. For example, questions in the "Grade 6.9.1 Cumulative Pp Set for Tape Diagrams and Equations" require students to create a model for equations.

5.1c – Questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts.

Questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts. The *Middle School Course Guide for Teachers* states, "Access to new mathematics and problems prompts students to apply their conceptual understanding and procedural fluency to novel situations," and "As their learning progresses, they make connections between different representations and strategies, consolidating their conceptual understanding, and see and understand more efficient methods of solving problems, supporting the shift toward procedural fluency."

Questions and tasks in grade 6 provide opportunities for students to apply conceptual understanding to new problem situations and contexts. For example, in grade 6, Unit 5, Lesson 2, "Activity 2.4: Card Sort: Spaghetti Sauce," students use diagrams to discover the ratios of different ingredients for a dish. After the activity is completed, instructions are given for the teacher to ask, "What if you were making this tasty sauce and got the ratios wrong? What would happen?"

5.2 Development of Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.2a	All criteria for guidance met.	2/2
5.2b	All criteria for guidance met.	3/3
5.2c	All criteria for guidance met.	3/3
5.2d	All criteria for guidance met.	1/1
—	**TOTAL**	9/9

5.2a – Materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level tasks.

Materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level tasks. For example, the *Middle School Course Guide for Teachers*, explains the contents of a math lesson by stating, "The first event in every lesson is a Warm-up. A Warm-up designed to strengthen number sense or procedural fluency asks students to do mental arithmetic or reason numerically or algebraically."

Materials provide tasks designed to build the students automaticity and fluency necessary to complete grade-level tasks. Automaticity is focused on during the warm-up part of lessons as seen in grade 6, Unit 4, Lesson 7, "Warm-up 7.1: Number Talk: Evaluating Quotients." This activity has students mentally calculating quotients of 400 and 8, 80 and 8, 16 and 8, and 496 and 8.

Materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level tasks. A focus on fluency is often found in the Cumulative Pp Set in a lesson. An example can be found in "Grade 6.8.2 Cumulative Pp Set for the Distributive Property, Part 1." Throughout the problem set, comprehensive questions on the distributive property can be seen that focus on identifying and applying strategies efficiently for the concept.

5.2b – Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within the lesson and/or throughout a unit.

Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within the lesson and throughout a unit. For example, Unit 2, Section A of the "Section Level Planning Guide" states, "By connecting verbal descriptions, equations, and diagrams, students develop flexibility in representing division situations."

Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within the lesson and throughout a unit. In grade 6, Unit 3, Lesson 4, "Activity 3: Lots of Parallelograms," it states, "While there is not one correct way to find the area of a

parallelogram, each parallelogram here is designed to elicit a particular strategy. Parallelograms A and C encourage decomposing and rearranging the parallelograms into a rectangle. Parallelogram B is not as easy to decompose and rearrange (though some students are likely first to try that approach), and may prompt students to enclose the parallelograms and subtract the areas of the extra pieces. The grid and its absence allow students to reason concretely and abstractly, respectively, about the measurements that they need to find the area." This allows students to practice flexible mathematical procedures.

5.2c – Materials provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson and throughout a unit.

Materials provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson and throughout a unit. For example, the two goals in Section A within the "Section Level Planning Guide" are to "Perform and explain decimal calculations using multiple strategies, with emphasis on operations involving money contexts. Develop and demonstrate understanding of place value relationships through base-ten representations and bundling concepts."

Also, in grade 6, this is shown in the Activity Synthesis portion of some activities. For example, in grade 6, Unit 3, Lesson 3, "3.3: Off the Grid," the Activity Synthesis has students displaying their work and then comparing that to what other classmates have done. Questions include, "What worked well in this approach for Figure___? What did not work well?" and "What would make this strategy for Figure___ more complete or easy to understand?" These questions lead students to evaluate the procedures, processes, and solutions that the class has shown for efficiency, flexibility, and accuracy.

5.2d – Materials contain embedded supports for teachers to guide students toward increasingly efficient approaches.

Materials contain embedded supports for teachers to guide students toward increasingly efficient approaches. The *Middle School Course Guide for Teachers* reinforces this, stating, "Across lessons and units, students are systematically introduced to representations and encouraged to use those that make sense to them. As their learning progresses, students make connections between different representations and the concepts and procedures they show. Over time, they see and understand more efficient methods of representing and solving problems, which supports the development of procedural fluency."

Materials contain embedded supports for teachers to guide students toward increasingly efficient approaches in almost every lesson in the section called "Advancing Student Thinking." This section provides materials for teachers to guide students' thinking toward the most efficient way to understand the content if the student is struggling.

5.3 Balance of Conceptual Understanding and Procedural Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.3a	All criteria for guidance met.	2/2
5.3b	All criteria for guidance met.	3/3
5.3c	All criteria for guidance met.	6/6
—	**TOTAL**	11/11

5.3a – Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed.

Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed in the "Section Level Planning Guide" for grade 6 in Unit 3. This planning guide ties in the conceptual understanding of why the area of a triangle is half the area of a parallelogram to the procedural fluency of finding the area of shapes. For example, in "Section C: Triangles and Other Polygons," the materials state, "In this section, students investigate the relationship between triangles and parallelograms through hands-on activities and visual reasoning. They learn how a parallelogram can be divided into two identical triangles by a diagonal, which helps them understand that a triangle's area is half that of its corresponding parallelogram. Students explore different base-height pairs for triangles, mastering the area formula (1/2)bh. They progress to solving complex polygon area problems by decomposing shapes into triangles and rectangles, enhancing their skills in mathematical communication and application to real-world scenarios."

The "Lesson Narratives" of grade 6, Unit 2, Lesson 1 and Lesson 10 state how the conceptual and procedural emphasis of the TEKS are addressed. Lesson 1 states, "Students begin exploring these relationships in concrete situations." Lesson 10 then states, "This is the first of two lessons in which students pull together the threads of reasoning from the previous nine lessons to develop a general algorithm for dividing fractions."

5.3b – Questions and tasks include the use of concrete models and manipulatives, pictorial representations (figures/drawings), and abstract representations, as required by the TEKS.

Questions and tasks include the use of concrete models and manipulatives as required by the TEKS. In grade 6, Unit 5, Lesson 17, "17.2: Cubes of Paint," the materials task students to use concrete models as required by the TEKS 6.4E. "To make a particular green paint, we need to mix 1 ml of blue paint to 3 ml of yellow." Represent this recipe with one blue snap cube and three yellow ones and display each set horizontally (to mimic the appearance of a tape diagram)."

Questions and tasks include the use of pictorial representations (figures and drawings) and abstract representations, as required by the TEKS. In grade 6, Unit 8, Lesson 1, "1.2: Using Diagrams to Show That

Expressions Are Equivalent," questions and tasks include pictorial representations and abstract representations as required by the TEKS 6.7C. The Activity Narrative states, "Students use diagrams to show that expressions can be equivalent or expressions can be equal for only one value of their variable. Working through these tape diagrams with small whole numbers, where students can count grids and use lengths to check their results, allows students to begin to generalize about equal and equivalent expressions."

5.3c – Materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS.

Materials include supports for students in defining and explaining representational models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS. In grade 6, Unit 2 Lesson 5, "5.3: Drawing Diagrams to Show Equal-sized Groups," the materials include supports for students in defining and explaining representational models to abstract concepts of multiplication and division. For example, the materials include teacher instructions such as "Invite each group to present the solution on their visual display. Ask the rest of the class to think about two things: whether the equations make sense, and how the presented diagram shows the number of groups, the size of each group, and the total amount. Doing so will help students see the structure of the problems in the equations and diagrams."

Materials include supports for students in connecting, creating, defining, and explaining representational models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS. For example, the students connect, create, define, and explain representational models to abstract concepts during the Activity Synthesis within grade 6, Unit 2, Lesson 10, "Activity 10.3: Dividing by Non-Unit Fractions" as students work with tape diagrams for fractional division.

Materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS. In grade 6, Unit 2, Lesson 4, "4.2: Reasoning with Pattern Blocks," the materials include supports for students in connecting the concrete models using pattern blocks to the abstract concepts of multiplication and division. "Students start by using pattern blocks to represent multiplication of a whole number and a fraction. For example, if a hexagon represents 1 and six triangles make a hexagon, then each triangle represents 1/6, which is the same as 1÷6. They can then use six triangles to represent 6 x 1/6 = 1 or 6 x 1÷6 = 1. Later, students use the blocks to reason in the opposite direction, answering questions such as, "How many 1/2s are in 4?" These kinds of questions serve as a stepping stone to more abstract questions such as, "What is 4 divided by 1/2?'"

5.4 Development of Academic Mathematical Language

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.4a	All criteria for guidance met.	3/3
5.4b	All criteria for guidance met.	1/1
5.4c	All criteria for guidance met.	6/6
—	**TOTAL**	10/10

5.4a – Materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, and other language development strategies.

Materials provide opportunities for students to develop their academic mathematical language using visuals, manipulatives, and other language development strategies. In grade 6, Unit 3, Lesson 8, "8.3 Decomposing a Parallelogram," students use a set of parallelograms to cut out and fold into the triangles that make a parallelogram. Once that is complete, the teacher selects students who use varying approaches to the last question to share their reasoning with the class and display their work for all to see. The teacher asks, "What is the same and what is different among the different approaches?"

In grade 6, Unit 4, Lesson 5, "5.2: More Reasoning with Pattern Blocks," the materials provide support for introducing academic mathematical language using visuals in the launch of the activity, which states, "Create a display that includes an image of each shape labeled with the name and the fraction it represents of a trapezoid." The activity then continues to focus on using manipulatives to answer questions and explain mathematical connections through whole-class discussions. The materials emphasize the development of academic mathematical language through teacher prompts, such as "Use this routine to support whole-class discussion. After a student shares their reasoning for whether they agree with Diego or Jada, ask students to restate what they heard using precise mathematical language. Ask the original speaker if their peer was accurately able to restate their thinking. Call students' attention to any words or phrases that helped to clarify the original statement. This provides more students with an opportunity to produce language as they interpret the reasoning of others."

5.4b – Materials include embedded teacher guidance to scaffold and support students' development and use of academic mathematical vocabulary in context.

The materials define conversations as a scaffold for the development and use of academic mathematical vocabulary in the "*Middle School Course Guide for Teachers*. The guide states, "Conversations act as scaffolds for students developing mathematical language because they offer opportunities to simultaneously make meaning, communicate that meaning, and refine the way content understandings are communicated."

In grade 6, Unit 9, Lesson 7, "7.2: Amusement Park Rides," the materials include teacher guidance to scaffold and support students' development and use of academic mathematical vocabulary in context.

The "Support for English Language Learners" section of the activity states, "To help students strengthen their understanding of solutions to inequalities, ask students to write a response to the prompt, "What does it mean to be a solution to an inequality?" and ask them to provide an example of an inequality and a solution to it. Have students read their writing to a partner. The partner can ask clarifying questions as well as confirm that their partner has written an inequality and has a correct solution. Teachers remind students to capture new ideas and language after each time they share. For students needing extra support, a sentence frame such as "If a number is a solution to an inequality, it means that _____," is provided.

5.4c – Materials include embedded teacher guidance to support the application of appropriate mathematical language to include vocabulary, syntax, and discourse to include guidance to support mathematical conversations that provide opportunities for students to hear, refine, and use math language with peers and develop their math language toolkit over time as well as guide teachers to support student responses using exemplar responses to questions and tasks.

Materials include embedded teacher guidance to support the application of appropriate mathematical language to include vocabulary, syntax, and discourse to include guidance to support mathematical conversations that provide opportunities for students to hear, refine, and use math language with peers and develop their math language toolkit over time, as well as guide teachers to support student responses using exemplar responses to questions and tasks. In the *Middle School Course Guide for Teachers*, teacher guidance on using MLRs to support academic language is addressed. The materials state, "Mathematical Language Routines (MLRs) are instructional routines that provide structured but adaptable formats for amplifying, assessing, and developing students' language. The MLRs included in this curriculum were selected because they simultaneously support students' learning of mathematical practices, content, and language." In another section of the topic in the guide, the materials continue with "MLRs, included in select activities of each unit, offer all students explicit opportunities to develop mathematical and academic language proficiency. These 'embedded' MLRs are described in the Teacher Guide for the lessons in which they appear." The use of discourse during these routines is also stated within the materials as "Using these supports can help maintain students' engagement in mathematical discourse and ensure that the struggle remains productive."

The "MLR4 Information Gap" within grade 6, Unit 6, Lesson 13, Activity 3 includes embedded teacher guidance to support the application of appropriate mathematical language, vocabulary, syntax, and discourse to support mathematical conversations through the use of sentence stems that provide opportunities for students to hear, refine, and use math language with peers. "Display questions or question starters for students who need a starting point, such as: 'Can you tell me . . . (specific piece of information),' and 'Why do you need to know . . . (that piece of information)?'."

5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	Materials do not include a description of how the TEKS process standards are incorporated and connected throughout the course.	0/2
5.5c	Materials do not include a description for each unit of how the TEKS process standards are incorporated and connected throughout the unit.	0/2
5.5d	All criteria for guidance met.	1/1
—	**TOTAL**	2/6

5.5a – TEKS process standards are integrated appropriately into the materials.

The TEKS process standards are integrated appropriately into the materials. The "Grade 6 Scope and Sequence" document identifies which of the TEKS, including process standards, are included in each lesson.

Process standards that are focused on at the lesson level, are listed with the TEKS on the cover page of the lesson. For example, grade 6, Unit 4, Lesson 1 cites the process standard 6.1A: "Apply mathematics to problems arising in everyday life, society, and the workplace." In the lesson, the materials include tasks and questions that integrate this process standard, such as buying snacks from a concession stand, buying groceries, or planning a party.

5.5b – Materials include a description of how TEKS process standards are incorporated and connected throughout the course.

Materials do not include a description of how TEKS process standards are incorporated and connected throughout the course.

5.5c – Materials include a description for each unit of how TEKS process standards are incorporated and connected throughout the unit.

Materials do not include a description for each unit of how the TEKS process standards are incorporated and connected throughout the unit.

5.5d – Materials include an overview of the TEKS process standards incorporated into each lesson.

The TEKS process standards are coded at the top of each lesson, and an overview involving the standards can be seen in the "Lesson Narrative." For example, in grade 6, Unit 6 "Lesson 5: Interpreting Rates," all of the TEKS, including a process standard, are shown at the top of the lesson page. The "Lesson Narrative," "Learning Goals," and "Learning Targets" sections of the page provide an overview of how these

standards are being addressed in the lesson. The "Lesson Narrative" section states, "students have explicit opportunities to justify their reasoning and critique the reasoning of others." The "Learning Goals" section states, "Choose which unit rate to use to solve a given problem and explain the choice (orally and in writing)," and the "Learning Targets" section states, "When I have a ratio, I can calculate its two unit rates and explain what each of them means in the situation," showing how each section supports the process standard stated for the lesson.

Materials include an overview of the TEKS process standards incorporated into each lesson. For example, the "Activity" description within grade 6, Unit 6, Lesson 13, Activity 3 states, "This may take several rounds of discussion if their first requests do not yield the information they need (1.D). It also allows them to refine the language they use and ask increasingly more precise questions until they get the information they need (1.D)."

6. Productive Struggle

Materials support students in applying disciplinary practices to productive problem-solving, including explaining and revising their thinking.

6.1 Student Self-Efficacy

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.1a	All criteria for guidance met.	3/3
6.1b	All criteria for guidance met.	6/6
6.1c	All criteria for guidance met.	3/3
—	**TOTAL**	12/12

6.1a – Materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics.

The Grade 6 "Course Narrative" states, "Through interactive lessons, real-world applications, and thoughtful practice, students will build confidence as problem solvers and critical thinkers." This shows a focus in the materials for students to think mathematically, solve problems, and make sense of the mathematics involved.

Materials provide opportunities for students to think mathematically, persevere through solving problems, and make sense of mathematics. The materials in grade 6, Unit 10, Lesson 1, Activity 1 provide opportunities for students to think mathematically and make sense of mathematics by asking the students, "Who can restate ___'s reasoning in a different way? Does anyone want to add on to _____'s reasoning? Do you agree or disagree? Why?"

6.1b – Materials support students in understanding, explaining, and justifying that there can be multiple ways to represent and solve problems and complete tasks.

In the grade 6, Unit 4 "Section Level Planning Guide," the materials provide learning targets for each section of the unit. In "Section A: Exploring, Adding, and Subtracting Decimals," the materials state a learning target as "Perform and explain decimal calculations using multiple strategies, with emphasis on operations involving money contexts." In "Section B: Multiplying Decimals," the materials state a learning target as "Develop and justify multiple strategies for multiplying decimal numbers using visual models, algorithms, and real-world contexts." In "Section C: Dividing Decimals," the materials state a learning target as "Develop and apply the long division algorithm to compute quotients with whole numbers and decimals, demonstrating understanding through multiple solution methods and verbal explanations." Together, these learning targets support students in understanding, explaining, and justifying that there can be multiple ways to represent and solve problems and complete tasks throughout the unit.

Materials support students in understanding, explaining, and justifying that there can be multiple ways to represent and solve problems and complete tasks. For example, the Activity Narrative within grade 6,

Unit 1, Lesson 2, Activity 1 states, "Students will match pairs of index cards that show equivalent algebraic expressions, discussing with a partner how they know the expressions are equivalent."

6.1c – Materials are designed to require students to make sense of mathematics through multiple opportunities for students to do, write about, and discuss math with peers and teachers.

In the *Middle School Course Guide for Teachers*, the materials describe the "MLR7 Compare and Connect" routine used in the instructional materials and state, "In this routine, students make sense of mathematical strategies other than their own by relating and connecting other approaches to their own. Prompt students to reflect on, and verbally respond to, these comparisons (for example, by exploring why or when to approach, represent, or say a mathematical problem a certain way, or by identifying and explaining correspondences between different mathematical representations or methods)." This routine, when implemented, is designed to require students to make sense of mathematics through multiple opportunities for students to do, write about, and discuss math with their peers and teacher.

Materials are designed to require students to make sense of mathematics through multiple opportunities for students to do, write about, and discuss math with peers and teachers. In grade 6, Unit 10, Lesson 3, "3.3: Cereal Boxes," the materials state, "Invite students to prepare a visual display of their table, graph, and equation that represent the relationship between the area of the base and height of the cereal box. As students analyze each other's work, ask them to share what is especially clear in a particular representation. Listen for and amplify the language students use to describe how the area of the base decreases as the height of the cereal boxes increases. Invite students to identify where they see the volume of 225 cubic inches represented in the table, graph, and equation. Listen for and amplify the language students use to describe how the coordinates of each point on the graph multiply to 225. This will foster students' meta-awareness about language and support constructive conversations."

6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	All criteria for guidance met.	6/6
6.2b	All criteria for guidance met.	4/4
—	**TOTAL**	10/10

6.2a – Materials support teachers in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications.

In the *Middle School Course Guide for Teachers*, the instructional routine "MLR7 Compare and Connect" supports teachers in guiding students to decide on a problem-solving approach, solve problems, share their solutions and reasoning on a display, and then, finally, observe other students' work and reflect on their own and other students' problem-solving approaches. The materials state, "In this routine, students make sense of mathematical strategies other than their own by relating and connecting other approaches to their own. Prompt students to reflect on, and verbally respond to, these comparisons (for example, by exploring why or when to approach, represent, or say a mathematical problem a certain way, or by identifying and explaining correspondences between different mathematical representations or methods)."

Materials support teachers in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications. For example, the "Lesson Synthesis" within grade 6, Unit 3, Lesson 3 guides students to reflect on the problem-solving approaches by stating, "Ask students to go back through the activities and find problems in which these strategies were used—one strategy at a time."

6.2b – Materials include prompts and guidance to support teachers in providing explanatory feedback based on student responses and anticipated misconceptions.

Materials offer prompts and guidance to support teachers in providing explanatory feedback based on student responses and anticipated misconceptions. For example, the "Anticipated Misconceptions" section within grade 6, Unit 6, Lesson 1, Activity 3 offers the teacher guidance with misconceptions by stating, "Students may struggle to sort objects that weigh one pound versus one kilogram. Tell them one object that matches with each unit and have them decide the other objects by comparison."

In the materials, some activities include a section titled "Advancing Student Thinking." This section often gives possible student misconceptions and gives guidance and prompts to the teacher on how to address them. For example, in grade 6, Unit 3, Lesson 8, "8.3: Decomposing a Parallelogram," the materials state, "Students may struggle to form a new parallelogram because the two composing pieces are not both facing up (i.e., either the triangle or the trapezoid is facing down). Tell them that the shaded side of the cut-outs should face up. Students may struggle to use the appropriate measurements needed to find the

area of the parallelogram in the first question. They may multiply more numbers than necessary because the measurements are given. If this happens, remind them that only two measurements (base and height) are needed to determine the area of a parallelogram."