

Hand2mind, Inc.

Supplemental English Mathematics, 6 Hands-On Standards Mini-Lessons-Grade 6

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Supplemental	9798899380297	Both Print and	Static
		Digital	

Rating Overview

TEKS SCORE	TEKS BREAKOUTS	ERROR CORRECTIONS	SUITABILITY	SUITABILITY	PUBLIC FEEDBACK
	ATTEMPTED	(IMRA Reviewers)	NONCOMPLIANCE	EXCELLENCE	(COUNT)
100%	37	4	Flags Not in Report	Not Applicable	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	18 out of 23	78%
2. Progress Monitoring	18 out of 20	90%
3. Supports for All Learners	36 out of 36	100%
4. Depth and Coherence of Key Concepts	14 out of 16	88%
5. Balance of Conceptual and Procedural Understanding	36 out of 38	95%
6. <u>Productive Struggle</u>	15 out of 21	71%

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	0	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	0
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	Materials do not contain evidence of vertical alignment or a rationale	A./F	
1.14	explaining how content builds across grade levels.	4/5	
1.1b	All criteria for guidance met.	3/3	
1.1c	All criteria for guidance met.	2/2	
1.1d	All criteria for guidance met.	2/2	
1.1e	Materials did not contain evidence of resources or guidance for	0/2	
1.16	instructional leaders to support educators.	0/2	
	TOTAL	11/14	

1.1a – Materials include an alignment guide outlining the TEKS, ELPS, and concepts covered, with a rationale for learning paths across grade levels (vertical alignment) and within the same grade level (horizontal alignment) as designed in the materials.

The materials include an *Alignment Guide* that outlines the Texas Essential Knowledge and Skills (TEKS), English Language Proficiency Standards (ELPS), and concepts covered within the same grade level (horizontal alignment). This alignment is supported by an adjacent *Supplemental Guide* for each unit, which includes a scope and sequence, strand overview, and learning path, with sections dedicated to language development.

Each of the lessons within the materials contains individual narratives and activity opportunities that cover the designated TEKS and ELPS for each skill. Each of the activities also features scripted teacher supports that assist with horizontal alignment within the strand overview housed in the "Strand Summary" section.

The materials do not include rationales that examine how certain skills are prioritized at each grade level and how the progression of learning prepares students for future success (vertical alignment).

1.1b – Materials include an implementation guide with usage recommendations and strategies for effective educator use, such as just-in-time supports, advanced learning, or as a course.

The "Implementation Guide" includes several usage recommendations, such as language development supports, teacher-directive sections (e.g., Say and Ask), student practice and intervention opportunities, manipulative use, and extension activities.

The materials include guidance for usage in various instructional formats, evidenced by the teacherfacing guidance document titled "A Walk Through a Lesson" for each of the five units.

Activities in each lesson include scripted guidance, along with sentence stems to support both teachers and students during instruction. Each lesson includes a "Look Out!" section to help teachers identify and address student misconceptions, as well as formative assessments, enabling them to quickly assess the level of instruction that students have mastered after each lesson.

1.1c - Materials include a TEKS correlation guide with recommended skill entry points based on diagnostic assessment results.

The materials include a *TEKS Correlation Guide* with an assessment-based entry procedure and diagnostic features.

The materials include a diagnostic in the form of a ten-question assessment within the *Supplemental Guide*'s "Assessment and Project Tracking Sheets."

The section titled "Progress Monitoring" includes directions for the facilitation of the diagnostic assessment, which recommends lesson suggestions following the administration of the assessment to increase student understanding.

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

The materials include protocols with corresponding guidance for both unit and lesson internalization, evidenced by unit sections titled "A Walk Through a Lesson." These teacher and student pages contain scripting and internalization notes that help educators implement the activity to support student skill growth. It includes visual examples of the preparation and facilitation of the activity to support teachers in visualizing each activity.

Each of the strands includes an "Academic Mathematical Language" section and a "Unit Summary" section, providing educators with guidance on how to front-load critical academic and content-specific vocabulary and predict student misconceptions.

The materials include consistent structuring components that provide each lesson with predictable steps for lesson internalization, including Objective, Materials, EL Support, "Try It!", "Talk About It," Solve It, "More Ideas," "Look Out!", "Formative Assessment," and student work pages.

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

The materials do not include evidence of resources or guidance for instructional leaders to support educators.

1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	All criteria for guidance met.	7/7
1.2b	This guidance is not applicable to the program.	N/A
1.2c	The materials do not include explicit evidence of family support or	0/2
1.20	suggestions for supporting student progress present within the materials.	0/2
_	TOTAL	7/9

1.2a – If designed to be static, materials include detailed lesson plans with learning objectives, teacher and student materials, lesson components with suggested timeframes, and assessment resources aligned with the TEKS and ELPS.

The materials are designed to be static, and each lesson plan contains a lesson objective aligned to the corresponding TEKS and ELPS, a detailed outline of lesson content, a complete materials list, suggested time durations, and formative assessment opportunities.

Each lesson is well-arranged in a consistent, user-friendly design for visible access, culminating in a single-problem formative assessment and reinforced by extensive student practice opportunities within the student work pages.

Each unit has Assessments, Progress Tracking Sheets, and Answer Keys. "Student Lesson Tracking Progress Reports" are available for each lesson and are detailed individually. These reports are provided in both English and Spanish, and they also include answer keys for teacher use. Teachers can score Diagnostic Assessments to determine if the student has shown grade-level mastery of the concept using the "Assessment Student Progress Report."

1.2b – If designed to be adaptive, materials include detailed lesson overviews with learning objectives, lesson components with suggested timeframes, and assessment resources aligned with the TEKS and ELPS.

This guidance is not applicable because the program is not designed to be adaptive.

1.2c - Materials contain support for families in Spanish and English for each unit, with suggestions on supporting the progress of their student(s).

The materials do not include explicit evidence of family support or suggestions for supporting student progress.

While the "Implementation Guide" states, "Students can track their progress toward mastery of each lesson concept," and the materials include academic mathematical language that could be used to

support students' families.	progress at home,	the materials are	not explicitly de	signed to provide	such support for

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	All criteria for guidance met.	2/2
2.1b	All criteria for guidance met.	2/2
2.1c	This is a static program that includes print assessments. Assessments are not designed to be digital assessments that include printable versions and accommodations, including text-to-speech, content and language supports, and calculators, that educators can enable or disable to support individual students.	Not Scored
2.1d	All criteria for guidance met.	4/4
2.1e	All criteria for guidance met.	4/4
_	TOTAL	12/12

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

The materials provide a definition and the intended purpose of diagnostic assessments. The definition and intended purpose of the summative assessment are provided in the *Supplemental Guide*, which includes a paragraph describing the purpose, administering the assessments, and tracking progress. Materials provide information to evaluate students' prior knowledge, and teachers use an "Assessment Student Progress Report" to determine if the student showed grade-level mastery of the concept.

The "Depth and Coherence of Key Mathematical Concepts" section defines the types of instructional assessments and their intended purposes. For each item missed, the section recommends a lesson to strengthen the student's understanding.

The materials provide formative assessments consistently within each lesson, allowing for ongoing feedback on students' understanding of the concept. Each lesson includes an explanation of the purpose of the formative assessments.

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

The materials include guidance to ensure consistent, but not accurate, administration of assessments.

The materials provide general guidance but lack explicit instructions for administering assessments.

The materials do not include time limits, guidance for each component of the assessment, data desegregation instructions, or administrator scripts.

2.1c – Digital assessments include printable versions and accommodations, including text-to-speech, content and language supports, and calculators, that educators can enable or disable to support individual students.

The materials do not include digital modalities or interfaces for assessments; however, they do provide printable versions of formative assessments.

The materials show no evidence of text-to-speech, content, language supports, or calculators for student use.

The materials are not designed for student-facing digital use. While housed in a digital platform for educators, assessments are provided only in print and do not include digital accommodations.

2.1d – Materials include diagnostic assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels.

The diagnostic assessment includes two question tiers that vary in complexity from basic recall to skills application. For example, the diagnostic assessment for the "Statistics and Probability" strand requires students to calculate the interquartile range from a set of numbers and to use their knowledge of measures to determine which measure would best represent a set of data.

The diagnostic assessment includes multi-select questions, such as a paper-based interactive sample item, where students select two or more answers.

2.1e – Materials include a variety of formative assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels.

The materials include a variety of formative assessments with TEKS-aligned tasks or questions. The "Progress Monitoring" section within the *Supplement Guide*'s "Implementation Guide" explains that formative assessments are embedded throughout the lessons. These occur in activities such as "Try It!," "Talk About It," "Formative Assessment," and "More Ideas." The complexity of these items varies, ranging from hands-on problem-solving with manipulatives to algebraic reasoning, and some require students to interpret or analyze the problem.

The formative assessments include interactive item types such as simulated drawing tools, drag-and-drop, drop-down text selection, and text response, reflecting TEA-released paper-based interactive items.

2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	The materials do not include rationales for correct or incorrect responses on instructional assessments.	1/3
2.2b	All criteria for guidance met.	1/1
2.2c	All criteria for guidance met.	2/2
2.2d	All criteria for guidance met.	2/2
2.2e	This guidance is not applicable to the program.	N/A
_	TOTAL	6/8

2.2a – Instructional assessments include scoring information and guidance for interpreting student performance, including rationale for each correct and incorrect response.

The materials do not provide guidance for interpreting student performance, and they also lack a rationale for student responses, thereby limiting educators' ability to understand student thinking.

While materials provide answer keys for assessments, they do not offer rationales for correct or incorrect responses.

The materials do not provide guidance for educators to intervene with identified students. Instead, they include information for educators to work one-on-one with the student using manipulatives to explain the concept, but lack rationales.

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

The materials provide guidance for using the included tasks and activities, targeting skills as determined by assessment data. The "Assessment Student Progress Report" includes an aligned lesson to provide support for each question on the assessment. Each question number listed in the table has a corresponding lesson number for that unit that the teacher can reference to re-teach as needed.

The diagnostic assessment provides educators with guidance recommending next steps following assessment completion: "For each item missed, a lesson is recommended to strengthen the student's understanding. If the progress measure is still not met upon completion of the lesson, the 'Look Out!' can be used as an indicator for potential misconceptions that may need to be addressed before the next progress measure."

The summative assessment provides educators with guidance recommending next steps following assessment completion: "If a student correctly answers the Exercise portion but does not meet the

Standards-Based Math Practice, he or she will need some additional practice translating the concrete and pictorial representations to an abstract representation."

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

The materials include progress- and growth-tracking tools for both educators and students. The "Assessment Progress Report" is designed for educators to record assessment results for each student in each unit. Each unit assessment consists of ten questions. The citation provides a table for educators to identify the question number, lesson number, skill description, and a field to indicate whether the student met the objective on the assessment.

The "Student Lesson Tracking Progress Report" is designed to help students track their progress and understanding throughout the lesson. The report lists concepts and skills for students to self-monitor their progress by entering a checkmark to indicate understanding or an "x" for a question or skill requiring further attention or reteaching.

The materials provide tables within the *Supplemental Guide* for each unit, with columns for three different progress-monitoring dates throughout the year. The first column is designed to be a diagnostic assessment, the second column is intended for formative assessments during the lesson block, and the third column is intended for a summative assessment at the culmination of an instructional block.

2.2d – If designed to be static, materials provide prompts and guidance to support educators in conducting frequent checks for understanding at key points throughout each lesson or activity.

The materials provide prompts and guidance questions to support educators in checking for understanding throughout the activity. The materials also include a "Look Out!" section within each lesson to help educators anticipate and address common student errors and misconceptions.

The "Talk About It" section within each lesson offers prompts for educators to *say, ask,* or *discuss*, which provides scripted support in facilitating meaningful conversations and ensuring student understanding.

The materials include prompts within the margins to remind educators to pause and pose questions throughout the learning cycle.

2.2e – If designed to be adaptive, materials provide frequent checks for understanding at key points throughout each lesson or activity.

This guidance is not applicable because the program is not designed to be adaptive.

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	SCORE SUMMARY	RAW SCORE
3.1a	All criteria for guidance met.	1/1
3.1b	All criteria for guidance met.	4/4
3.1c	All criteria for guidance met.	2/2
3.1d	Digital materials do not include accommodations, including text-to-speech, content and language supports, and calculators that educators can enable or disable to support individual students.	Not Scored
3.1e	All criteria for guidance met.	2/2
_	TOTAL	9/9

3.1a – Materials include explicit educator guidance for lessons or activities scaffolded for students who have not yet reached proficiency in prerequisite or grade-level concepts and skills.

The introductory pages of the materials guide educators through each element of the lessons in the "Walk Through a Lesson" section. The materials guide educators through each specific area of the lesson, encouraging educators to efficiently and effectively utilize the resource.

The materials include a diagnostic tracking sheet that guides the educator to a corresponding lesson for each question or skill if students answer the question incorrectly. For example, on the "Geometry" strand diagnostic assessment, students answer ten questions. Question 10 asks students to draw a net for a solid figure (right rectangular prism). If a student is unsuccessful with this task, teachers can then direct students to Lesson 5.

Each lesson features Ask questions that serve to activate prior knowledge and aid student thinking with sentence stems. The activity also includes visual aids and manipulatives to aid student comprehension.

3.1b – Materials include explicit educator guidance for language supports, including preteaching and embedded supports for developing academic vocabulary and unfamiliar references in text.

The *Supplemental Guide* contains lists of vocabulary words titled "Academic Mathematical Language" for each unit. Following this is a section entitled "Language Development/Supports," which lists supports specific to that particular unit. For example, within the *Supplemental Guide* under the "Overview for the Number System Strand," the guidance instructs educators to: "Point out to students that the root of the

word quadrant, quad, represents 4, as a useful way for students to remember there are 4 quadrants on the xy-coordinate plane."

The "Language Development/Supports" section within the "Strand Overview" provides educators with guidance on how to provide support for students with unfamiliar vocabulary. Each of the product's lessons includes several sentence stems and questions that aid in student comprehension as they discuss the activity with both the teacher and their peers.

The materials include an embedded "EL Support" section within each lesson designed to assist emergent bilingual (EB) students. This portion of the activity provides various scaffolds and strategies educators can use to help students fully grasp the targeted standard or skill before moving forward. For example, vocabulary support helps students link what they already know to the new concept being taught.

3.1c – Materials include explicit educator guidance for enrichment and extension activities for students who have demonstrated proficiency in grade-level and above grade-level content and skills.

The materials include explicit educator guidance for enrichment and extension activities for students who have demonstrated proficiency in grade-level content.

The materials include educator guidance for enrichment and extension opportunities at grade level and feature sidebar notes outlining specific suggestions for enrichment and extension tasks that encourage deeper exploration of concepts and skills. For example, the "More Ideas" activities within each lesson might be used as lesson extensions. The "More Ideas" activities offer enrichment opportunities designed to deepen students' understanding of the topic and its connection to the targeted skill. These activities include a variety of tasks, such as creating graphs, reenacting scenarios, working with a partner, or responding to questions that relate the lesson to real-world contexts. In some cases, this section also directs students to additional practice in their workbook, including specific page references.

The materials provide guidance to educators on assisting students through activities that utilize question stems, comments, and student pairing ideas. For example, in "Ratios," the "More Ideas" section suggests that educators extend the lesson using Cuisenaire Rods to generate equal ratios. It then provides a scenario for students to use with their manipulatives. Additionally, the "Black-Line Masters" page for student practice includes a problem for every lesson under Challenge!, targeting students who have demonstrated proficiency in grade-level skills related to each lesson.

3.1d – Digital materials include accommodations, including text-to-speech, content and language supports, and calculators that educators can enable or disable to support individual students.

The product does not include digital materials with accommodations, such as text-to-speech, calculators, content, language supports, etc.

The materials are not available in a student-facing digital format and therefore do not offer built-in accommodations for diverse student needs. They consist of printable lesson plans and "Black-Line Masters" intended for student use.

3.1e – Materials include educator guidance on offering options and supports for students to demonstrate understanding of mathematical concepts in various ways, such as perform, express, and represent.

The materials include educator guidance on offering supports for students to demonstrate understanding of mathematical concepts in various ways. For example, in "Area of a Trapezoid," the materials instruct educators to help students analyze new shapes by comparing them to shapes they are already familiar with and by combining previously learned processes.

The "More Ideas" section of the lesson offers options for various ways students can demonstrate their understanding of the concept. For example, in "Expressions with a Variable," students write an expression, represent an expression with color tiles, or use relational geosolids to represent an expression for volume and surface area.

3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	All criteria for guidance met.	5/5
3.2b	All criteria for guidance met.	2/2
3.2c	All criteria for guidance met.	3/3
3.2d	All criteria for guidance met.	2/2
3.2e	All criteria for guidance met.	2/2
_	TOTAL	14/14

3.2a – Materials include explicit (direct) prompts and guidance for educators to build knowledge by activating prior knowledge, anchoring big ideas, and highlighting and connecting key patterns, features, and relationships through multiple means of representation.

The materials include direct prompts and guidance for educators to build knowledge and advice for communicating big ideas under bolded text directives, including Say and Ask, such as, "Where are these numbers on a number line? Which absolute value is greater?" The materials provide specific prompts and guidance to help students understand concepts, connect key ideas, and access prior knowledge. In "Decimal Operations," the materials guide educators to "remind students that numbers to the right of a decimal point represent a fractional part of a whole number. Ask students if they should multiply to get the greatest amount. Why or why not? Ask students if multiplying or dividing the decimals will result in a greater number." Multiple examples of this type of guidance and questioning are available in most lessons.

The materials guide educators in activating prior knowledge by reviewing vocabulary previously taught in prior lessons. In "Find the Area," students review the following vocabulary words: *parallelogram*, *perpendicular*, *triangle*, *rectangle*, *square*, and *area*. Each of the five "Strand Overviews" is complete with a section titled "Language Development/Supports." The overview provides educators with specific guidance, including direct prompts and guidance stems, to help them build knowledge by highlighting and connecting key patterns, relationships, and features through multiple means of representation.

In the "Try It!" activity of each lesson, the materials utilize the connection of key relationships through multiple means of representation. For example, in a "Unit Rates" lesson, students solve a problem involving unit rates. Students work with pattern blocks to represent the situation and then are asked to draw the groups they create and write their numbers as ratios and fractions. After the lesson, the "Talk About It" section prompts educators to ask students about different unit rate situations and what they have in common, anchoring the big idea of using unit rates across multiple situations. In the "More Ideas" section, students work with snap cubes to represent the number of passengers in train cars and are guided to see the ratio of passengers to vehicles. These examples help illustrate the multiple

representations of unit rates, percentages, and equivalent ratios, enabling students to connect key concepts.

3.2b – If designed to be static, materials include educator guidance for effective lesson delivery and facilitation using various instructional approaches.

The materials include embedded guidance and provide educators with prompts to facilitate effective lesson delivery using various instructional approaches, including opportunities for student discourse and hands-on exploration via strategically utilized math manipulatives. The materials include directions for utilizing 14 different manipulatives: Algebra Tiles, Build-a-Grid, Centimeter Cubes, Color Tiles, Cuisenaire rods, Geoboards, Magnetic Percent Bar Answer Boards, Nets for Relational Solids, Pattern Blocks, Rainbow Fraction Circles, Rainbow Fraction Tower Equivalency Cubes, Relational GeoSolids, Snap Cubes, and XY Coordinate Pegboards.

In "Expressions and Exponents," the materials present educators with two different methods for students to grasp the concept. Students write the expanded version of an exponent and base, modeling the exponent with snap cubes to illustrate its value. The student practice page for "Proportions" asks students to solve proportion questions using two different methods: Cuisenaire rods and cross-multiplication and division without the use of manipulatives. Another example includes the "Try It!" activity from the lesson "Shapes in the Coordinate Plane," where students use an XY coordinate pegboard to represent shapes in a real-world scenario involving furniture organization on a patio. Educators prompt students to design the patio through guided instruction and then transfer their ideas onto graph paper. Students respond to questions about what they notice about the shapes, aloud or in writing, including comparisons between them. With teacher-led guidance, hands-on manipulatives, and independent practice complete with formative assessment at the end, students engage with multiple instructional strategies that support diverse learning styles.

In "Wholes and Percents," various instructional approaches help students learn to use percents to find wholes and parts. In the "Try It!" activity, students work with manipulatives (Magnetic Percent Bar Answer Boards) to create concrete representations of percentages and then use bar segments to model different parts of the problem. Following this procedure, educators guide students through various types of questioning in the "Talk About It" section. Students can answer these questions either verbally or in writing. Students approach an extension in the "More Ideas" section where they work with a partner to model and solve the problem. Students then have an independent practice problem that can be used as a formative assessment.

3.2c – Materials include multi-tiered intervention methods for various types of practice and structures and educator guidance to support effective implementation.

The materials include multi-tiered intervention methods for various types of practice and structures, ranging from universal support for all (Tier 1) to targeted interventions for some (Tier 2), and intensive

supports for students requiring individualized help (Tier 3). The material elements "A Walk Through a Lesson" and "Black-Line Masters" provide a grouping guide, recommending whether students should work independently, in pairs, or in small groups.

The materials incorporate multiple learning cycle elements within each lesson, serving as a consistent framework throughout the product. The "Try It!" activity and "Talk About It" section can be used as guided practice where educators ask students scaffolded questions and guide them through the problem-solving process. Students can complete independent practice in the "Solve It" and "Formative Assessment" sections. Many lessons ask students to work in pairs and use manipulatives in collaborative practice. For example, in "Find the Ratio," the materials group students into groups of three. The corresponding student practice page could be assigned to students as independent work, partner work, or group collaboration. EB supports are embedded in each lesson and can scaffold for language learners. The "More Ideas" section provides follow-up or enrichment activities that could serve as Tier 2 or Tier 3 Interventions. However, this option is not explicitly stated, and educators may need to infer its use.

The materials include educator guidance to support the effective implementation of multi-tiered intervention methods. There is ample assistance available to help educators understand how to facilitate lessons, including questions to ask, strategies to utilize, student grouping techniques to implement, and misconceptions to identify.

3.2d – Materials include enrichment and extension methods that support various forms of engagement, and guidance to support educators in effective implementation.

The materials include enrichment and extension methods, as well as implementation guidance, in all lessons across the product. In the "More Ideas" section of each lesson, the materials provide educators with multiple alternative methods to teach students about concepts addressed in the lesson. The materials provide educators with sufficient guidance to implement enrichment and extension examples throughout the product. For instance, in a "Compare Rational Numbers" lesson, the materials provide educators with guidance on what to ask and say in the "Talk About It" section. Within the "Solve It" section, which could be used for enrichment or extension, the materials instruct educators to reread the problem with students and then write a brief report. The "More Ideas" section can also be utilized for enrichment or extension.

Several examples demonstrate how the materials incorporate enrichment and extension methods to support various forms of engagement, including guidance on implementing these strategies effectively. For instance, in "Ratios," the materials prompt educators to instruct students to use color tiles to solve problems and to use Cuisenaire rods to generate equal ratios. In a "Divide Multi-Digit Numbers" lesson, students work in pairs using a Build-a-Grid. The lesson "Coordinate Graphs" invites teachers to extend the lesson by having students graph various landmarks around the school, locate the landmark on a pegboard or graph grid, and then have students write instructions on moving from one landmark to another.

The "Challenge!" practice, located within each of the product's "Student Pages," is an extended response exercise featuring an open-ended, constructed response question to help educators gauge student mastery of content. Additionally, each lesson includes a section labeled "EL Support" that provides guidance on ways educators can provide English language support in lessons.

3.2e – Materials include prompts and guidance to support educators in providing timely feedback during lesson delivery.

The materials include prompts and guidance to support educators in providing timely feedback during lesson delivery. In the "Inequalities in the Real World" lesson, the "Try It!" activity provides educator guidance on what to say and ask, as well as potential answers that students should provide. For example, the materials prompt educators with: "Ask: Which side represents a greater number?" Then: "Guide students to write a greater than symbol in the circle." Another example from this lesson is: "Ask: Is two greater than three? Is four greater than three? Is six greater than three? Guide students to shade the part of the number line to the right of three." These examples help educators determine what to say and ask, as well as how to guide student responses.

In the lesson "Wholes and Percents," the materials prompt educators in the "Try It!" activity to ask students: "How many gallons do you think 10% of a full tank is?" Educators are encouraged to guide students in placing 10 percent segments on the board to find the ratio of the number of gallons to the percentage. Then, educators ask students how they can see the number of gallons in 10 percent. The materials instruct educators to guide students in filling the bar to 100 percent and recognize that 10 percent of a tank is equivalent to eight gallons. These prompts are helpful for educators to know what to say and ask to further assist students in making connections.

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	All criteria for guidance met.	4/4
3.3b	This guidance is not applicable to the program.	N/A
	The materials do not include educator guidance on providing and	
3.3c	incorporating linguistic accommodations for all levels of language	1/1
	proficiency.	
3.3d	All criteria for guidance met.	8/8
3.3e	This guidance is not applicable to the program.	N/A
_	TOTAL	13/13

3.3a – If designed to be static, materials include educator guidance on providing and incorporating linguistic accommodations for all 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.

The materials include implementation guidance to support educators in providing linguistic accommodations for all levels of language proficiency.

The student lesson material and the *Supplemental Guide* include EB support and guidance on incorporating multiple levels of language support to help students build academic language, including sentence stems, graphic organizers, and word banks. Supports are aligned to the ELPS proficiency levels to promote access and participation in mathematical discourse.

The materials include appropriate pre-production, beginning, intermediate, high-intermediate, and advanced EB supports.

3.3b – If designed to be adaptive, materials include embedded linguistic accommodations for all 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.

This guidance is not applicable to the program because it is not designed to be adaptive.

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

All lessons within the materials include a general "EL Support" section with teacher guidance on utilization of word banks, sentence stems, and other strategies.

The "Strand Overviews" within the *Supplement Guide* provide language development and support specific to each of the five strands, along with a description of how the ELPS are integrated into each lesson.

The materials do not include educator guidance on providing and incorporating linguistic accommodations for all levels of language proficiency.

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

The "Language Development/Supports" section within the *Supplement Guide* facilitates cross-linguistic connections and builds background knowledge to support oral discourse for language development. For example, in "Number System Language Development/Supports," the guidance states, "point out to students that the root of the word quadrant, quad, represents 4, as a useful way for students to remember there are 4 quadrants on the xy-coordinate plane," supporting the development of academic vocabulary and cross-linguistic connections. Another example states, "Compare the mathematical and everyday meaning of the word inequality. Students may think of inequality as describing a situation where people are treated unfairly. Ask how this meaning of the word relates to the mathematical meaning."

The materials include embedded guidance to support emergent bilingual students through written discourse, including opportunities for students to write explanations for solving problems and constructing word problems.

3.3e – 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.	4/4
_	TOTAL	6/6

4.1a – Practice opportunities throughout learning pathways (including instructional assessments) require students to demonstrate depth of understanding aligned to the TEKS.

The materials include practice opportunities on the student pages, requiring students to demonstrate their understanding of TEKS-aligned concepts. The formative assessment included in the learning pathway requires students to demonstrate depth of understanding aligned to the TEKS.

The materials introduce concepts using both concrete and representational models. For example, in a statistics lesson within the materials, students begin by analyzing a given data set and organizing the information into a table, and then use snap cubes to create a physical (concrete) representation of the data. After building their models, students generate and identify statistical questions based on their representations. In the extension activities, the materials encourage educators to guide students in exploring abstract ways to represent very large numbers. Additionally, students engage in discussions to distinguish between statistical and non-statistical questions that can be answered using the given data.

Instructional assessments provide students with meaningful opportunities to demonstrate their depth of understanding throughout the learning pathway. For example, in an assessment within the "Statistics and Probability" strand, students respond to a variety of questions that assess key concepts. These questions include calculating the range of a data set, creating appropriate graphs (such as histograms) to represent data, determining whether a graph is symmetric or not, analyzing statistical scenarios, and developing relevant questions based on given data.

4.1b – Questions and tasks, including enrichment and extension materials, increase in rigor and complexity, leading to grade-level and above grade-level proficiency in the mathematics TEKS.

The materials increase rigor and complexity throughout each lesson's consistent learning cycle, beginning with the problem-based section "Try It!," continuing with a discussion opportunity in "Talk About It,"

followed by opportunities to practice proficiency in the "Solve It" section, and extending learning in "More Ideas."

The materials include questions and tasks that build in complexity. For example, in one lesson, students explore ratios and proportions using concrete models, fractions, and decimals. Real-world problems, such as planning the planting of trees in a park, help students apply their understanding of ratios and rates. Students analyze these scenarios using scale factors, tables, graphs, and proportional reasoning to understand the concepts.

The materials increase in rigor and complexity, leading to proficiency at the grade level and above. For example, in "Fractional Number Sense," students first make estimations using concrete and pictorial models to verify their thinking. They then discuss and analyze the strategies used to arrive at their estimates. These activities are later extended to include decimals and percentages, allowing students to deepen and broaden their understanding, leading to above-grade-level proficiency.

4.2 Coherence of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.2a	All criteria for guidance met.	1/1
4.2b	All criteria for guidance met.	1/1
4.2c	The materials do not connect students' knowledge and skills to future grade levels.	2/4
_	TOTAL	4/6

4.2a – Materials demonstrate coherence across concepts horizontally within the grade level by connecting patterns, big ideas, and relationships.

The materials include horizontal coherence across concepts. For example, the "Geometry" unit shows horizontal alignment by having students build on their knowledge of geometric concepts. Students find the area of basic shapes, decompose complex polygons, and then apply those skills to trapezoids and the volume of prisms using fractional edge lengths. They also explore shapes on the coordinate plane and connect two-dimensional figures to three-dimensional solids, which aims to reinforce and extend their understanding of geometry.

The "Ratio and Proportions" unit demonstrates evidence of coherence across concepts horizontally. The materials begin with students learning how to write and represent ratios, then move on to unit rates and proportional problems. As students progress through the unit, they use models and tables, eventually connecting ratios to fractions and percents. The lessons build on one another to help students develop a strong foundation in proportional reasoning.

4.2b – Materials demonstrate coherence vertically across concepts and grade bands, including connections from grades 3–12, by connecting patterns, big ideas, and relationships.

The materials demonstrate coherence vertically across concepts and grade bands. For example, in the "Ratios and Proportions" unit, Lesson 3 introduces students to describing unit rates within ratio relationships. By Lesson 5, students progress to determining ratios and applying them to solve problems. Building on this foundation, the grade 7 "Ratios and Proportions" unit deepens conceptual understanding by having students identify the constant of proportionality and use it to graph and write equations representing proportional relationships in Lessons 4 and 5. This alignment facilitates the progressive development of skills, enabling students to first grasp key concepts and then apply them to real-world contexts.

The vertical alignment of the grades 6 and 7 materials is demonstrated in the "Expressions and Equations" units of each product, illustrating an alignment in algebraic thinking. In grade 6, students build foundational skills by exploring variables, algebraic expressions, and solving one-step equations and

inequalities in real-world contexts. Grade 7 builds on these concepts, with students expanding and simplifying expressions and solving more complex linear equations and inequalities, thereby increasing their understanding and application of algebraic reasoning.

The EB support section of each mini-lesson demonstrates vertical coherence by providing guidance for educators to review prior vocabulary (e.g., *data, statistical question, survey, interval, analysis, mean, median, quartile, deviation*) with students before starting the lesson.

4.2c - Materials demonstrate coherence across lessons or activities by connecting students' prior knowledge of concepts and procedures to the mathematical concepts to be learned in the current grade level and future grade levels.

The materials demonstrate coherence across lessons or activities by connecting students' prior knowledge within the grade level, but do not connect students' current knowledge to future grade levels.

The materials show coherence across lessons or activities within the current grade level by building on students' prior mathematical knowledge of real-world comparisons to introduce key algebra concepts. Students explore exponents, inequalities, and algebraic expressions using hands-on models to connect new skills to existing concepts. The materials build on students' prior knowledge of the base-ten system and arithmetic operations, and then extend those ideas to more complex concepts, such as dividing fractions, working with negative numbers, and using the coordinate plane. Hands-on models and visual tools help bridge earlier learning to current grade-level material.

The materials do not demonstrate coherence extending to future grade levels. No prompts or guidance ask students to consider how their current understanding of concepts connects to future learning. The lessons are based solely on current grade-level material. For example, in a lesson about fractional quotients, students solve a problem that involves finding patterns to divide fractions by other fractions. The materials prompt the educator to introduce the problem, distribute materials to students, and then have students complete the activity to solve the problem. The follow-up questions in the "Talk About It" section ask lower-level questions such as, "What operation did you use to solve the problem? Which fraction is the dividend, and which one is the divisor?" and "How do you multiply a fraction by a whole number?"

4.3 Coherence and Variety of Practice

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.3a	All criteria for guidance met.	2/2
4.3b	All criteria for guidance met.	2/2
_	TOTAL	4/4

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

The materials provide spaced retrieval opportunities within the "Strand Overview," enabling educators to reference prior learning and capitalize on spiraling learning opportunities.

The materials are structured to enable educators to utilize lessons independently of previous content. However, the "Strand Overview" table includes a column that compares what students have previously learned with content identified as new to the grade level.

The "Try It!" and "Formative Assessment" sections in each lesson could be extended to include skills previously covered. The "Talk About It" section integrates prior learning through questions designed to connect current knowledge with future learning.

4.3b - Materials provide interleaved practice opportunities with previously learned skills and concepts across learning pathways.

The materials provide interleaved practice opportunities, complete with practice sets of mixed skills, as part of a review at the culmination of each strand. Items from each lesson are mixed within this review to prompt students' discernment of the concepts addressed and the best approaches.

The materials enable students to explore various levels or approaches within the same general concept, and the lessons integrate practice across different skills or concepts in a mixed format. Additionally, educators are encouraged to revisit the "More Ideas" section of previous lessons and bring tasks and problems forward for students to practice again during subsequent lessons.

The *Supplemental Guide* states, "Interleaved Practice—More Ideas provides additional activities that can be interleaved throughout the strand to allow students to discern what mathematical concept is being addressed." Each skill within the "Strand Overview" includes a column with review item numbers.

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.	2/2
5.1c	All criteria for guidance met.	1/1
_	TOTAL	6/6

5.1a – Questions and tasks provide opportunities for students to interpret, analyze, and evaluate mathematical concepts and complex, real-world situations.

The materials include guiding questions that prompt students to think critically about the concepts and skills being explored. These questions are standards-aligned and serve as valuable checkpoints for educators to identify areas where students may need additional support. Embedded real-world examples throughout the activities further encourage application and analysis, helping students make meaningful connections beyond the classroom. The "More Ideas" section of the resource provides a range of enrichment activities that encourage students to interpret, analyze, and evaluate their results through multiple perspectives. These tasks extend learning by promoting deeper understanding and flexible thinking. Real-world settings include contexts such as students finding the area of a trapezoidal yard to cover with sod, scale-factor problems related to maps, and the use of integers in gameplay.

The materials provide questions and tasks that allow students to analyze mathematical concepts. For example, in "Algebraic Equivalencies: Distributive Property," the "Talk About It" section poses a question asking how the distributive property can be applied to a presented problem. Then the materials ask students to interpret a mathematical concept, in the next question: "What does it mean to 'simplify' an expression?"

The materials provide questions and tasks that allow students to interpret mathematical concepts. For example, in "Equations with a Variable," the "Try It!" activity asks students to solve a real-world problem using an equation with a variable. Students must interpret the word problem and write an equation to solve it. In the "Talk About It" section of the same lesson, students use equations to interpret a real-world story. Then, students explain how they approached solving the equations using reasoning.

5.1b – Questions and tasks provide opportunities for students to create concrete models and representations of mathematical situations.

The materials include questions and tasks that provide opportunities for students to create models and representations of mathematical situations by concrete means. The materials frequently utilize

manipulatives, such as Algebra Tiles, two-color counters, snap cubes, pegboards, and other tactile aids, to help students make connections between concrete models and abstract concepts.

In "Expressions and Exponents," students work with snap cubes to construct a concrete model of a 4x4 shape and then a $4 \times 4 \times 4$ cube. This concrete model aims to help students visualize the volume of the cube and the area of its faces in a tangible way. It allows them to connect what they see (layers of cubes) to the abstract formula ($4 \times 4 \times 4 = 64$). In "Find the Distance," students solve a problem that involves finding the distance between points. Students work with a coordinate pegboard and a graphing sheet to represent walking a distance from the pool to a park. Students use a rubber band to mark the distance on the pegboard and then graph the distance on the graphing paper. This activity applies the mathematical concept of representation to enable students to visualize distance. It guides them in thinking about the meaning of coordinates and their relationship to both axes on the graph.

In the "Challenge!" section at the end of each extension activity, the student pages pose problems that require students to engage in higher-order thinking regarding math processes and procedures. Each question has either a real-world application or a problem that requires a written response.

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

The materials include questions and tasks that provide opportunities for students to apply conceptual understanding to new problems and contexts; for example, in "Expressions and Exponents," students use snap cubes to model their understanding of exponents. Students create a four-by-four cube to show that four squared is 16 units. This conceptual understanding of exponents aims to help students create equivalent values for numbers containing exponents. In "Data Clues," students use colored manipulatives to create a representation of a bar graph, comparing values to enhance conceptual understanding through visuals. This approach enables students to compare data from a table and solve similar math problems.

In a previous lesson, students learn to plot points on the coordinate plane and recognize whether the line connecting two points is horizontal or vertical. "Find the Distance" then asks students to build on this concept to find the distance between two points on a coordinate plane. Students solve a real-world problem by applying their knowledge of points on a coordinate plane to get from one location to another.

In the "Solve It" section of "Ratios and Proportions," students apply their knowledge of ratios and proportional relationships to determine how many pints of paint are needed to cover a certain square footage of paint. They are then asked to set up a proportion that gives how many pints of paint cover x amount of square feet. Additionally, the "Try It!" activity in the same lesson asks students to determine how many pints of paint are needed to cover a 75-square-foot porch. The problem provides information to help students solve it in the new context.

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 mathematical tasks.

The materials include dedicated tasks that support fluency and automaticity, such as spiraled warm-ups, adaptive drills, and discussion questions—all of which contribute to the development of fluency.

The lessons center on introducing a concept and providing opportunities for students to practice that concept through problem-solving while also building fluency. The materials include 42 problems within a section of the "Strand Overview" titled "Problem Strings." Tasks are sorted into routines that educators can utilize consistently to increase fluency in a section called "Problem Talks."

5.2b – Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures throughout learning pathways.

The materials include a Learning Pathway resource within the product's *Supplemental Guide*, which provides a summary of the strands included in the lesson, along with the relevant standards, key concepts presented, and connections addressed. The Learning Pathway explains how lessons are built on prior knowledge and provides practice for students to utilize math procedures in efficient, flexible, and accurate ways.

The materials employ various strategies and representations throughout the year, including numbers, graphs, equations, and written descriptions, to solve problems. For example, the "Number System Learning Pathway" implements several strategies to help students build upon their prior knowledge, connecting what they have learned in previous grades to topics and skills being learned in the current grade level. According to the *Supplemental Guide*, the resource builds on students' knowledge of the baseten system and strengthens their understanding of decimals and place-value relationships.

The materials provide students with opportunities to determine which method they prefer while connecting applications of both methods, and aim to reinforce the idea that mathematical procedures are flexible. In another example from "Expressions with a Variable" within the "Expressions and Equations" strand, students solve a multiplication word problem using arrays and counters. The lesson supports flexibility by allowing students to choose the most efficient strategy. It also promotes fluency

and accuracy as students apply and strengthen their understanding of variable expressions through repeated reasoning.

5.2c - Materials provide opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy throughout learning pathways.

The materials include a "Talk About It" section embedded in each lesson, which provides opportunities for students to evaluate representations, models, strategies, and solutions to enhance their efficiency and flexibility. For example, in "Equivalent Expressions," students discuss whether there are multiple ways to represent perimeter and if the perimeter changes if expressed differently.

The materials include a "Talk About It" section embedded in each lesson, which provides opportunities for students to evaluate representations, models, strategies, and solutions to enhance their accuracy. For example, in the "Algebraic Equivalencies" lesson, students discuss how they know both sides of the equations are equivalent.

5.2d – Materials contain guidance to support students in selecting the most efficient approaches when solving mathematics problems.

The materials guide students in selecting the most efficient approaches when solving mathematics problems.

In a fractions lesson, the materials prompt students to solve problems with fraction operations using fraction strips. The materials then prompt educators to encourage students to compare strategies: "Did drawing the fraction strips take a long time? Can you find a way to solve these problems using just numbers? How can you find a common denominator quickly? Which method would be more efficient if the fractions had large denominators?"

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.

The materials explicitly state how the conceptual and procedural emphasis of the TEKS is addressed through the "Program Overview" within the *Supplement Guide*. Each lesson addresses conceptual emphasis through "an application problem that allows students to interpret, analyze, and evaluate the mathematical or real-world situation." While "students solidify their understanding of the mathematical concept, they use those relationships to fluently complete the grade level tasks by applying efficient, flexible, and accurate procedures to various contexts."

The "Strand Overview" within the *Supplement Guide* states how the materials address the conceptual and procedural emphasis of the TEKS. For example, the "Ratios and Proportions Strand Summary" specifies the conceptual emphasis as students should "explore the concept of ratios to further develop proportional reasoning," and the procedural emphasis as students should "learn to organize equivalent ratios into ratio tables to better represent their relationships."

The materials show a conceptual and procedural emphasis of the TEKS within the lessons. For example, in "Fraction Division," students use cubes to represent the amount of juice a pitcher can hold. Students record their measurements and write the fraction that the cubes represent (conceptual). Then, students answer the question, "How many servings will the pitcher hold?" by writing the division problem and quotient (procedural).

5.3b – Questions and tasks provide opportunities for students to use concrete models, pictorial representations, and abstract models as required by the TEKS.

The materials effectively incorporate questions and tasks that provide opportunities for students to use concrete models, pictorial representations, and abstract models, as required by the TEKS.

In "Ratios," students use concrete models, pictorial representations, and abstract models. For example, in the "Try It!" activity, students use Cuisenaire rods to build trains that represent ratios physically. In the "More Ideas" section, students use Color Tiles to model ratios, such as the ratio of frogs to ducks. Both of these activities provide hands-on manipulation of materials, serving as concrete models. Students draw and color a pictorial representation of rod trains on their paper for the "Try It!" activity. Students write

ratios using numbers and words to abstractly analyze whole-to-part, part-to-whole, and part-to-part relationships, answering questions within the "Try It!" activity.

In "Fraction Division," students utilize cubes concretely to physically build a tower that represents three-fourths of a gallon, using the outline of a tower as one whole gallon. Then, they use one-eighth of the cubes to build another tower showing equivalent amounts. These two examples demonstrate the use of concrete models. Students shade in towers on their recording sheet to represent the fraction amounts pictorially, and then draw and label the division lines on their shaded towers to show the number of one-eighth gallon portions in three-fourths of a gallon. Lastly, the materials provide examples of abstract models when students write the division problem in numerical form. Then, students solve the symbolic math equation.

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.

The materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract concepts, as required by the TEKS.

The materials include supports for students in connecting concrete, representational, and abstract models. In "Patterns and Function Tables," students build garden paths using Pattern Blocks (concrete), then record values in a function table (representational), and determine the rule y = 2x + 2 (abstract). In "Data Clues," students use Color Tiles to model dog weights by category (concrete), then organize the data into a table (representational), supporting analysis and abstract reasoning.

The materials include supports for students in defining and explaining concrete and representational models of abstract concepts. Within "Patterns and Function Tables," students use Centimeter Cubes to physically represent the number of fish in each aquarium (concrete). They arrange cubes to find the mode by finding the tallest stack, and then arrange cubes so all have equal height to model the mean. Students then transfer cube arrangements (representational) onto grid paper, which creates a visual diagram of the model (abstract).

5.4 Development of Academic Mathematical Language

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.4a	All criteria for guidance met.	1/1
5.4b	All criteria for guidance met.	2/2
5.4c	All criteria for guidance met.	1/1
5.4d	The materials do not include embedded guidance to facilitate mathematical conversations, which allows students to refine and use math language with their peers.	1/2
5.4e	The materials do not include embedded guidance to anticipate a variety of student answers, including exemplar responses to questions and tasks.	1/2
_	TOTAL	6/8

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

Each "Strand Overview" within the *Supplement Guide* includes language development and support for all students. For example, the "Probability and Statistics Strand Overview" encourages students to use sentence stems to develop their academic mathematical language during the "Try It!" activity and utilize general language-to-academic language connections for words such as *median* and *mean*.

The materials provide students with opportunities to develop academic language using visuals and manipulatives. For example, in "Mean, Median, Mode, and Range," students represent the median and mode with color tiles to help them visualize the meaning of these concepts.

5.4b – Materials include embedded educator guidance to scaffold, support, and extend students' use of academic mathematical vocabulary in context when communicating with peers and educators.

Each "Strand Overview" within the *Supplement Guide* includes language development guidance to scaffold, support, and extend students' use of academic vocabulary when communicating. For example, the "Geometry Strand Overview" provides guidance on using sentence stems during the "Try It!" activities to scaffold language development, stating, "Use the words length, width, and height consistently."

The materials include guidance to scaffold, support, and extend students' use of academic vocabulary in context when communicating with peers and educators. For example, in "Coordinate Graphs," the materials encourage educators to review vocabulary, remind students about the meaning of each quadrant, and explain that each quadrant has unique coordinate pair characteristics. The guidance encourages students to expand their vocabulary by graphing various landmarks around the school, such as buildings, parks, and offices, and writing instructions to find each location.

5.4c – Materials include embedded guidance to support student application of appropriate mathematical language and academic vocabulary in discourse.

The "Talk About It" section of each lesson provides guidance to support students' discourse using appropriate mathematical language and vocabulary. For example, in "Fractional Quotients," the materials recommend that educators ask students, "Which fraction is the dividend, and which one is the divisor?"

The materials embed guidance to support student application of appropriate mathematical language and vocabulary in discourse. For example, in "Wholes and Percents," the materials encourage educators to provide the following sentence frame to support students' use of academic language during the "Try It!" activity, "I used the ____ bar to represent ____."

5.4d - Materials include embedded guidance to facilitate mathematical conversations allowing students to hear, refine, and use math language with peers.

The materials include embedded guidance to facilitate mathematical conversations, enabling students to hear math language in conversation with peers. In "Unit Rates," the materials instruct students to "explain to each other how to use the model to find the unit rate of oak trees to maple trees."

In "Statistical Questions," the "More Ideas" section instructs students to work in pairs, where one partner creates questions about the data and the other partner attempts to answer them. The teacher asks the pairs to discuss whether the question is statistical or not.

The materials do not include embedded guidance to facilitate mathematical conversations, which allows students to refine and use math language with their peers.

5.4e – Materials include embedded guidance to anticipate a variety of student answers including exemplar responses to questions and tasks, including guidance to support and/or redirect inaccurate student responses.

Each lesson includes a "Look Out!" section to support and redirect students who provide inaccurate responses. For example, in "Find the GCF," the guidance instructs that "students may stop after finding one common factor, such as 4. Point out to students that they are looking for the greatest factor." For students who have made this error, further guidance states, "Explain that it is important to list all the factors of each of the numbers to identify the greatest common factor."

The materials do not include embedded guidance to anticipate a variety of student answers, including exemplar responses to questions and tasks.

5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	All criteria for guidance met.	2/2
5.5c	All criteria for guidance met.	1/1
_	TOTAL	4/4

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

The materials include appropriately integrated TEKS process standards. The materials appropriately integrate the process standards into each unit of study, with the "Strand Overview" in the *Supplemental Guide* providing an overview of the TEKS process standards incorporated into each unit.

In "Ratios," students use rods as concrete representations of quantities, draw and color rod trains on paper, and represent ratios in three different forms, integrating the Process Standard 1E: "students will create and use representations." Students also compare part-to-whole, whole-to-part, and part-to-part relationships, requiring them to interpret the meaning behind each ratio and integrate the Process Standard 1F: "Students will analyze relationships to connect and communicate mathematical ideas."

In "Absolute Value," students apply mathematics to problems arising in everyday life, society, and the workplace, integrating the process standards listed in the *Supplemental Guide*. In the lesson, students apply their understanding of absolute value to real-world financial situations, such as changes to bank accounts and managing debt. The lesson also asks students to communicate mathematical ideas and reasoning, explain their thinking, compare quantities using both symbolic and verbal reasoning, and discuss scenarios with a partner, encouraging the verbal communication of mathematical ideas and appropriately integrating the process standards.

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

The materials include a description of how the process standards are connected throughout the learning pathways in the "Strand Overview" located in the *Supplemental Guide* for each grade level.

The *Supplemental Guide* in each strand contains a dedicated section for "Process Standards." In the "Ratios and Proportions" strand, the materials provide a paragraph describing how process standards are implemented in the lessons of this strand. The materials outline how students will apply math to real-world problems through a structured problem-solving model, addressing the process standard of problem-solving. The material also describes how students make connections between mathematical concepts across lessons and topics, such as recognizing how ratios relate to fractions, proportions, and percents, demonstrating vertical and horizontal connections across related concepts.

Process standard A1 is incorporated as students apply mathematics to problems arising in everyday life, and when students visualize equivalent ratios and unit rates. Process Standard A3 is incorporated when students engage in hands-on learning, build models to justify their reasoning, and make sense of real-world proportional scenarios. Process Standards A5 and A6 are connected when students create, use, and analyze multiple representations to analyze relationships and make connections by recognizing how ratios relate to fractions, proportions, and percents in real-world situations.

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

Each "Strand Overview" within the *Supplement Guide* includes a table that contains the content and process standards covered in each lesson. Every lesson has "6.1 A-G" listed in the process standard column, stating that all standards are covered in each lesson. The guidance states that "Hands-On Standards Math Mini Lessons provides lessons that foster collaboration and communication with and between students. Each lesson engages students to apply their knowledge of problem-solving to real-world situations, as required by the process standards."

The "Strand Overview" within the *Supplement Guide* includes an overview of how the process standards are incorporated throughout the unit. For example, the "Expressions and Equations Strand Overview" states, "students apply math to real-world problems using a structured problem-solving model to visualize equivalent ratios and unit rates. Students also analyze patterns, organize data into function tables, and interpret the relationships between x and y-values."

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	The materials do not include opportunities for students to explain and justify that there can be multiple ways to solve problems and complete tasks.	1/3
6.1c	All criteria for guidance met.	3/3
_	TOTAL	7/9

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

The materials provide opportunities for students to think mathematically using manipulatives, persevere through solving problems by breaking multi-step problems into manageable parts, and make sense of mathematics by providing students with independent practice opportunities.

The materials include activities that provide students with opportunities to make sense of mathematical concepts. In "Addition and Subtraction of Equations," students solve problems using inverse operations, link physical models to more abstract equations, and apply mathematical concepts to real-world scenarios, allowing them to connect mathematical ideas to authentic experiences.

The materials provide opportunities for students to persevere through solving problems. In "Addition and Subtraction Equations," students persevere through solving problems as they construct and solve their equations in the "More Ideas" section. Students also practice perseverance when they use manipulatives to visualize their problem and then solve it as an equation.

The materials provide activities that enable students to explore and make sense of mathematical concepts. In "Addition and Subtraction Equations," students think mathematically during the "Talk About It" activity when the materials ask, "How does subtraction help you solve the problem?" and then in the "Solve It" section, where the materials ask students to "Explain how to use inverse operations to solve the equation."

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

The materials do not include opportunities for students to explain and justify that there can be multiple ways to solve problems and complete tasks.

The materials support students in understanding that there can be multiple ways to solve problems and complete tasks. For example, in "Ratios and Proportions," students write and represent ratios using two different methods. The "Try It!" activity utilizes Cuisenaire Rods as students transfer skills from evaluating whole-to-part, part-to-whole, and part-to-part relationships.

In "Statistical Questions," students are introduced to various methods for representing and interpreting data by answering questions directly, identifying statistical versus non-statistical questions, and using SnapCubes to represent and model data through tactile means.

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/or educators.

The materials provide multiple opportunities for students to engage with math, write about it, and discuss it with their peers. The "Try It!" activity section of each lesson features a hands-on approach that allows students to engage in hands-on math activities using manipulatives. The "Talk About It" section offers students opportunities to discuss math with their peers and educators. The "Formative Assessment" section provides students with the opportunity to solve math problems by writing.

The materials are designed to require students to make sense of mathematics through multiple opportunities for students to write about math with peers and educators. For example, in "Data Values Distribution," the materials guide educators to "have students write an explanation for why the number of shots on goal might be distributed the way it is" within the "Solve It" section.

The materials are designed to require students to make sense of mathematics through multiple opportunities for students to discuss math with peers and educators. For example, in "Unit Rates," students explain to each other how to use the model to find the unit rate within the "Solve It" section.

6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	The materials do not provide educators with guidance on students' opportunities to reflect on their problem-solving approaches.	4/8
6.2b	All criteria for guidance met.	4/4
_	TOTAL	8/12

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

The materials do not provide educator guidance on students' opportunities to reflect on their problem-solving approaches.

The materials support educators in guiding students to share their problem-solving approaches, including explanations, arguments, justifications, and multiple points of entry. The "Talk About It," "Solve It," and "More Ideas" sections support educators in guiding students to share their problem-solving approaches and strategies.

In the "Talk About It" section of "Find the GCF," students share how they know if they have identified all factor pairs for a number (explain). The materials then ask students, "How can you be sure you have created all the possible rectangles of each color?" (argument/justification). The "More Ideas" section illustrates various methods for finding the GCF (multiple points of entry).

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

The materials include educator guidance to support educators in responding to student needs. Each lesson contains a "Look Out!" section that informs educators of areas where students may be confused, along with suggested feedback to address these misconceptions. For example, in "Introduction to Integers," the "Look Out!" section states that students may "be confused that an integer such as -8 is less than -1." The section then offers guidance for educators to provide feedback to remedy student confusion, such as "use real-world contexts to help them see that the farther a negative integer is from 0, the less its value."

The materials provide a consistent "Potential Misconceptions" section within each of the *Supplemental Guide*'s "Strand Overviews." For example, in the "Geometry Strand Overview," the "Potential Misconceptions" section includes the statement that "students may have difficulty recognizing that the height of a trapezoid's internal triangle(s) is the same as the height of the trapezoid itself."

Additionally, the "Look Out!" section within each lesson highlights potential misconceptions that students may encounter when approaching the content. For example, in "Unit Rates," the "Look Out!" section informs educators that students may "mistakenly write the fraction as the reciprocal of the correct ratio." In another example found in "Fractional Quotients," the "Look Out!" section states that "some students may see that there are 6 twelfths pieces and think that the quotient is 6." The materials continue with suggested remedies to the anticipated misconceptions.