Hand2mind, Inc.

Supplemental English Mathematics, 7
Hands-On Standards Mini–Lessons–Grade 7

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Supplemental	**9798899380327**	**Both Print and Digital**	**Static**

Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	57	5	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. Productive Struggle	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	The materials do not include evidence of vertical alignment or a rationale 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 include evidence of resources or guidance for 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 and are contained 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, including language development supports, teacher-directed 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 teacher-facing guidance feature 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 of the lessons has a section to assist teachers with student misconceptions called "Look Out!" and formative assessments to help teachers 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 housed within the *Supplemental Guide*'s "Assessment and Project Tracking Sheets."

The "Progress Monitoring" section provides directions for facilitating the diagnostic assessment and offers suggestions for lessons that follow the assessment to enhance 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 suggestions for supporting student progress present in 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' progress at home, the materials are not explicitly designed to provide such support for families.

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 whether the student has demonstrated 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 probability of an event and use their knowledge of probability and data to determine which group of data has the greatest variability.

The diagnostic assessment includes multi-select questions, such as paper-based interactive sample items, 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 for their approach.

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 Unit 1 Diagnostic Assessment, students solve ten questions that cover the strand. If the student misses Question 10, the table directs the teacher back to Lesson 11.

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 pre-teaching 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 Expressions and Equations" strand, the guidance instructs educators to: "Compare the terms equality

and inequality. Point out that the prefix in- can mean 'not.' Have students think of other words that use the prefix in the same way, such as inefficient, incredible, and incapable."

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 "Solve Percent Decrease Problems," the "More Ideas" section suggests that educators challenge students to find the price of an item after two markdowns: "Suppose a store sells an item for $50 regularly but is offering 20% off because the item is damaged. In addition, there is a storewide 25% off. Have students use the Magnetic Percent Bar Answer Board to solve." Additionally, the "Black-Line Master" page for student practice includes a problem for every lesson under "Challenge!" for 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 "Ratios and Proportions," students analyze proportional relationships and use them to solve real-world and mathematical problems.

The "More Ideas" section of the lesson offers options for various ways students can demonstrate their understanding of the concept. For example, in the lesson titled "Solve Percent Increase Problems," students use Rainbow fraction circles to calculate percents, work in pairs to determine percents using percent bars, or complete practice questions to model understanding of percents.

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, "What is the scale factor for the second ramp? What is the scale factor if you compare the second ramp to the third ramp Jonathan and his friends built?" The materials provide specific prompts and guidance to help students understand concepts, connect key ideas, and access prior knowledge. In "Write and Solve Linear Equations," the materials remind educators that students already have experience solving multistep equations. This lesson builds on that foundation by having students apply their prior knowledge to solve word problems. In the "Talk About It" section, the materials guide educators to prompt students to model an equation and compare how solving it differs from the equation presented in the "Try It!" activity. Educators are also encouraged to facilitate discussion around how changes in the given data affect the value of x. Students then solve a new problem, consider an equivalent situation, and explain their reasoning. Throughout the lesson, the materials provide multiple opportunities for students to activate prior knowledge and deepen understanding by using both concrete and abstract representations to support their problem-solving. 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 "Combine Quantities to Make Zero," the materials activate prior knowledge by reviewing vocabulary previously taught before the current content lesson begins. In this lesson, students review the following vocabulary words: *integers, positive, negative,* and *zero pairs*.

In the "Try It!" activity of each lesson, the materials utilize the connection of key relationships through multiple means of representation. A "Finding the Area of a Circle" activity asks students to find the area of a circle by tracing fraction shapes on graph paper to create a circle. Students find the area of a parallelogram and create it on the graphing paper based on the area of the circle. Through multiple

guided steps, students apply their prior knowledge of solving for the area of a circle to create a shape that resembles the more familiar parallelogram. This task helps students justify and internalize the formula. In the "Talk About It" section, students describe the relationship between the radius, diameter, circumference, and area of a circle. Through these multiple representations and explanations, students understand how area is estimated and calculated, and then how the formula can be used in multiple ways.

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 thirteen different manipulatives: Algebra Tiles, AngLegs, Centimeter Cubes, Magnetic Percent Bar Answer Boards, Polyhedral Dice, Rainbow Fraction Circles, Rainbow Fraction Circle Rings, Rainbow Fraction Squares, Relational Geo Solids, and Spinners.

In "Find the Circumference of a Circle," the concepts of circumference and pi are presented through various instructional approaches to support a deep conceptual understanding. Students engage in hands-on learning by measuring the diameter and circumference of real-world circular objects and discovering the relationship between diameter and circumference. They organize their findings in a data table and calculate a ratio, which leads them to generalize the value of pi. Guided discovery introduces the formula for circumference. The lesson includes a real-world application that asks how much ribbon is needed to wrap around a can, aiming to embed authenticity into the lesson. The "Talk About It" section encourages student discourse in discussing how to find the circumference from the radius. The "More Ideas" section encourages students to work and communicate in groups. Visual and concrete models, such as pegboards and traced circles, help further support student understanding. With teacher-led guidance, hands-on manipulatives, and independent practice, students engage in multiple instructional strategies that support diverse learning styles, culminating in a formative assessment.

In "Find the Angle Measurement," students solve for unknown angles. Students use AngLegs and protractors for hands-on experience, while educators are guided to ask students to construct angles and measure them. Students use visual models and charts to record their measurements, look for patterns, and then connect those patterns to algebraic equations. The lesson includes real-world problems, such as angles formed by hands on a clock, to make the math more real-world and relatable. Students discuss their thinking, compare angle relationships, and explain how they determine the type of angle they are working with. Students work with a partner to "draw a set of vertical angles and measure one of them. Then have a partner write an equation to represent each of the other angles on the drawing and solve the equations." Then, students check with the protractor using hands-on tools. In the formative assessment for independent practice, students solve a real-world problem involving a plumber working with pipes. Multiple examples of different instructional approaches help ensure students' understanding.

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!" and "Talk About It" sections can be used as guided practice where educators ask students scaffolded questions and guide students 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. The corresponding student practice pages 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 example, in "Convert Rational Numbers to Decimals," the "Solve It" section provides explicit instructions for educators to have students illustrate an example by cutting paper and drawing pictures. In the "More Ideas" section, educators have students use Rainbow Fraction Circles and Rainbow Fraction Circle Rings to solve the "Try It!" problem. Then, educators instruct students to work in pairs and solve a problem using Centimeter Cubes. 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 "Determine the Constant of Proportionality," "Try It!" activity, students determine the constant of proportionality by graphing the relationship on a pegboard. In the "More Ideas" section of the lesson, students use Rainbow Fraction Circles to solve the same problem. In "Multiply Integers," students summarize the rules for multiplying integers, and then use two colored counters to model the rules.

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 "Write and Solve Inequalities," 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: What is the solution to the inequality? What does it mean? Guide students to say that $x \leq 6$. Ask: How can we show all the possible values of x on a number line? Guide students to draw a filled-in circle at 6 and shade all the values less than 6." These examples help educators determine what to say and ask, as well as how to guide student responses.

In "Model Probabilities," the materials guide educators within the "Talk About It" section to help students write an equation for each spinner that shows the sum of the probabilities. The materials then instruct educators to elicit from students that the sum is always one. The guidance continues to ask students: "Can a probability ever be greater than 1?" Instructors should elicit that probability is always between 0 and 1. The guidance explains to students that a value near 0 indicates an event is unlikely, a value near 1 indicates the event is likely, and a value near 1/2 indicates the event is neither unlikely nor likely. 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
3.3c	The materials do not include educator guidance on providing and incorporating linguistic accommodations for all levels of language proficiency.	1/1
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 the "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 EB 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 include instructional assessments that provide opportunities to demonstrate a deep understanding of key mathematical concepts. For example, an assessment within the "Ratios and Proportions" strand features tasks that involve analyzing data and writing equations to solve problems, extrapolating new information from existing data sets, evaluating mathematical expressions, and completing and interpreting proportional relationships in table form. This diversity of question types ensures students can apply their knowledge in multiple ways, reinforcing their understanding of core TEKS-aligned concepts.

Each lesson features authentic discussion opportunities within the "Talk About It" section, referencing skills previously taught and encouraging connections to prior learning. Each activity also includes an "EL Support" section to support EBs. In this section, several scaffolds and supports are provided for educators to incorporate into their lessons, ensuring students have mastered the skill before progressing. These supports include academic vocabulary learned in previous grade levels and serve to provide scaffolding for new knowledge.

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 a ratios and proportions lesson, students determine unit rates, graph proportional relationships, determine the constant of proportionality, and graph and write equations when given tabular, pictorial, verbal, numeric, graphical, and algebraic representations.

The materials increase in rigor and complexity throughout each mini-lesson's consistent learning cycle, beginning with the problem-based introduction titled "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." For example, in a lesson on 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.

The materials serve to increase rigor and complexity by way of extensions to each lesson via "Try It!" activities, followed by a section titled "More Ideas." Each lesson includes a real-world problem-based scenario followed by an enriching "Talk About It" portion. Each of the lessons features topics discussed in the "Talk About It" section that reference skills previously taught, allowing students to connect their prior learning. In a lesson from the "Rates and Proportions" strand, students recall the word *proportional* and what they learned about the word in prior grades.

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 solving 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 grade 6's "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, grade 7's "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 supports 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 grade 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 through guidance for the educator to review prior vocabulary (e.g., *data, statistical question, survey, interval, analysis, mean, median, quartile, deviation*) learned 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. Materials connect students' prior knowledge of number patterns, unit rates, and percents to more advanced concepts in proportional reasoning. Students build on these foundations to understand the constant of proportionality and solve real-world problems using tables, graphs, and equations. They also extend their understanding of percentages to complete multi-step problems, such as percent increase and decrease.

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 on proportions, the teacher is asked to provide students with a problem about proportional relationships. 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 does the x and y axis represent?" and "Does the line go through the origin?" Students do not make connections to future grade levels.

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 using answer boards and percent magnets to model a store sale 25 percent off, and interpreting the meaning of both the equations and inequalities.

The materials provide questions and tasks that allow students to analyze mathematical concepts. For example, in "Make Equivalent Ratios," the "Solve It" section asks students to build two ratios and draw them on Fraction Squares. Students "explain whether the ratios are equivalent." Both of these exemplify asking students to "interpret" mathematical concepts.

The materials provide questions and tasks that allow students to interpret mathematical concepts. For example, in "Determine Probability and Fairness," the "Solve It" section guides educators to instruct students to reread the problem with students and "have students explain in writing how they determined whether the boards were fair or unfair." Students make a judgment regarding the fairness of the boards. They must support their reasoning by explaining how they made that determination.

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 "Make Equivalent Ratios," students work with fraction squares as concrete models to decide if two ratios are equivalent. Students stack the fractions to show they are equivalent. The fraction squares are physical, hands-on manipulatives that students can use to see and feel the sizes of parts being compared.

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 "Identify Plane Sections of Three-Dimensional Shapes," educators are reminded that students possess background knowledge of different two-dimensional and three-dimensional objects. In this lesson, students apply their knowledge of geometric objects to describe the different two-dimensional geometric objects that occur when slicing three-dimensional objects. Students consider the example of a cake in the shape of a rectangular prism to apply their knowledge of 3-D shapes.

In "Find the Area of Irregular Figures," students use a pegboard to create an irregular shape to calculate the area. Students then transfer the shape to dot paper to section it into smaller shapes. This hands-on practice prepares students to solve areas of other irregular shapes.

In "Determine Unit Rates," students apply previous knowledge of unit rates using whole numbers to solve a problem involving determining appropriate unit rates involving fractions in a recipe. This lesson allows students to apply their conceptual knowledge to a real-world situation and solve different types of problems.

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 fluency development.

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 "Expressions and Equations Learning Pathway" deepens students' foundational knowledge of equivalent expressions by introducing equivalent expressions using rational coefficients. Within the "Expressions and Equations" strand, students write and represent expressions to encourage different solution pathways. The use of algebra tiles in a 20-minute timed "Try It!" activity provides an opportunity for students to transfer skills from finding expression "clues" to creating an equivalent expression. This transfer is demonstrated in the "Talk About It" lesson section, thereby showing efficient, flexible, and accurate mathematical procedures throughout the learning pathways.

Each strand's 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. In the "Ratios and Proportions" strand, students solve multistep percent problems via efficient mathematical procedures using proportional reasoning. In the "Expressions and Equations" strand, students write and solve equations from word problems and have the flexibility to use the most

effective equation. In the "Geometry" strand, students find the area of circles and irregular shapes and solve for unknown angles using simple equations with accurate formulas. In the "Statistics and Probability" strand, they use data to compare populations, make predictions, and find the probability of events using well-planned problem-solving methods. These lessons build on what students already know and help them apply math in different ways to solve real-world and complex problems.

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 the "Graph and Write an Equation of Proportional Relationships" lesson, students discuss how to determine if a relationship is proportional in ways different from using the graph.

The materials include a "Talk About It" section embedded in each lesson that provides students to evaluate representations, models, strategies, and solutions to increase their accuracy. For example, in the "Determine the Constant of Proportionality" lesson, students discuss multiple ways to accurately calculate and verify the constant of proportionality.

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 an "Equations" lesson, the materials prompt students to use a digital balance scale or digital algebra tiles to model and solve equations. After solving visually, the program overlays symbolic steps using inverse operations and asks students to match them. The program prompts students through various stages of the process, asking the following: "How does the model relate to the steps you just wrote? Was drawing helpful, or did it take longer? Try solving the same equation using only numbers. When would using inverse operations be more helpful than drawing a model?" The program tracks students' strategy choices and recommends more efficient options based on problem complexity.

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 "The Number System Strand Summary" specifies the conceptual emphasis as students should "understand how opposite quantities combine to form zero," and the procedural emphasis as students should "reexamine all four operations under the lens of using positive and negative integers."

The materials show a conceptual and procedural emphasis of the TEKS within the lessons. For example, in "Add and Subtract Integers," students answer questions about scoring an online tennis game with points gained being represented by positive numbers and points missed represented by negative numbers. Students use Algebra Tiles to represent positive and negative integers (conceptual). Then students answer the question, "How can we know the total number of balls Jamal misses?" Students write an equation to commute numbers with their signs (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 "Find the Area of Irregular Figures," students use concrete models, pictorial representations, and abstract models. For example, in the "Try It!" activity, students utilize pegboards to physically plot points and create an irregular figure using pegs and rubber bands. They form shapes on the pegboard to represent parts of the irregular room, serving as concrete examples. For pictorial representations,

students transfer the figure to dot paper and draw straight lines to form the irregular figure, as well as outline internal shapes. To demonstrate abstract models, students use mathematical formulas and apply them to the representations to find the area of the internal shapes.

In another example with "Construct Triangles," students use AngLegs pieces to physically construct triangles with different side lengths and angles. Students manipulate different colored pieces to test triangle possibilities. These representations provide concrete models for students. Students then use the Triangle Mat diagram to visualize the placement of sides and angles, and then draw and label triangles on paper. This task represents pictorial representations.

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 "Write Equivalent Expressions," the "Try It!" activity utilizes pictorial models with Algebra tiles to model the expression described in the word problem (concrete). Students use the Algebra Tiles to model 18 - 2x. The "More Ideas" section poses the (abstract) question of "Can an expression have more than one equivalent expression?"

The materials include supports for students in defining and explaining concrete and representational models of abstract concepts. In "Write and Solve Inequalities," students use Algebra Tiles to model inequalities (concrete). Students physically build the models and then use the models to interpret when to reverse a symbol when solving a problem symbolically (abstract). Students also create a number line to represent the solution set of the inequality $x \leq 6$ (representational). Finally, students show all the possible values of x on the number line by drawing and shading a circle at 6 and shading all the values less than 6.

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 "Number System 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 *commute* and *associate*.

The materials provide students with opportunities to develop academic language using visuals and manipulatives. For example, in "Convert Percents to Fractions," students represent equivalent values with Rainbow Fraction Circles to help them visualize the meaning of the word equivalent.

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 "Number System Strand Overview" provides guidance on using sentence stems during the "Try It!" activities to scaffold language development. It states, "have students point up while saying 'positive' and down while saying 'negative' to internalize which is which. You may also have them use their fingers to trace right on a number line while saying 'positive' and left while saying 'negative.'"

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 "Determine Overlap of Data Lesson," the materials encourage educators to review vocabulary and ask students about the meaning of each of the measures of central tendency as it relates to the rain problem. The guidance encourages students to extend their vocabulary use by rearranging the data points, allowing them to gain a deeper understanding of variability.

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 "Determine Overlap of Data," the materials recommend that educators ask students, "What are the central tendencies? Discuss what each central tendency would mean in terms of the rainfall data set."

The materials embed guidance to support student application of appropriate mathematical language and vocabulary in discourse. For example, in "Draw Inferences from Data," the materials encourage educators to read a problem with students and then allow students to "compare the data sets by writing two or three sentences discussing the data."

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 "Write and Solve Linear Equations," the materials provide students with an equation with two different answers. Students discuss with their partner and explain their thinking.

In "Solve Subtraction Problems with Integers," the materials ask students to work in pairs to create and solve a problem in which a diver starts on a boat at six feet above sea level and then dives to observe objects underwater.

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 "Model Probabilities," the guidance instructs that "Some students might struggle to associate the value of a probability with the idea of an event being likely, unlikely, or neither." For students who have made this error, further guidance states, "Use Rainbow Fraction Tower Equivalency Cubes with a 0–1 number line to demonstrate the concept."

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 "Make Equivalent Ratios," the materials include multiple examples of how the lessons appropriately integrate process standards. The "Solve It" section exhibits Process Standard 7.1E: "students will create and use representations," when students use physical fraction models and draw their visual representation. Students then write ratios in multiple forms to represent equivalent ratios.

In "Find the Angle Measurement," the materials include multiple examples of how lessons appropriately integrate process standards. Process Standard 7.1A: "Students will apply mathematics to problems arising in everyday life, society, and the workplace," is demonstrated in the lesson, which uses real-life contexts, such as clock hands to discuss angles and a plumber aligning pipes to explore angle measures. Students connect math to practical, real-world situations. Process Standard 7.1E: "Students will create and use representations" is exhibited by students using manipulatives, drawings, and equations to illustrate and represent angles on a clock, and using equations to find supplementary angles.

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 "Number System" strand, the materials provide a paragraph describing how process standards are implemented in the lessons of this strand. Students apply math to real-world problems using a structured problem-solving model. They describe situations where opposites combine to zero, perform integer operations, and convert rational numbers to decimals using hands-on activities to reinforce these concepts.

Process Standard A1 is incorporated in the lesson when students apply mathematics to problems arising in everyday life, and when students solve a problem about playing a game and adding up the points.

Process Standard A2 is implemented when students use a problem-solving model. Process Standard A5 is incorporated when students use concrete, abstract, and symbolic representations in the problem-solving process.

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 "7.1 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 "Ratios and Proportions Strand Overview" states, "students explore the concepts of ratios and proportional relationships in a meaningful way. The concrete experiences (Rainbow Fraction Squares, XY Coordinate Pegboard, and Magnetic Percent Bar Answer Boards) that the activities provide will strengthen students' ability to recognize and work flexibly with these concepts."

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 problems.

The materials provide activities that enable students to make sense of mathematical concepts. In "Solve Percent Increase Problems," students use magnetic percent bars to connect abstract percentages to concrete quantities. The materials prompt students to think through their steps consistently throughout the problem-solving process, ensuring they can make sense of the mathematical concept of percentages of a whole.

The materials provide opportunities for students to persevere through solving problems. In "Solve Percent Increase Problems," students persevere through solving problems when the materials ask them to solve multi-step problems. Breaking problems into manageable parts allows students to persevere and includes phrasing such as: "How do we determine the amount of money Maya has in her account after a year? How would we determine the amount of money in her simple interest account after two years?"

The materials provide activities that enable students to explore and make sense of mathematical concepts. In "Solve Percent Increase Problems," students use a magnetic percent bar manipulative, which allows them to think conceptually. The materials ask students to determine percentages using proportional reasoning, enabling them to engage in mathematical reasoning beyond performing rote calculations.

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 "Find Probabilities," students compare and express theoretical and experimental probability, promoting two different methods. The "Try It!" activity with spinners provides students with opportunities to understand multiple methods for finding probabilities by evaluating fractions, decimals, and percents, demonstrating that there is more than one way to think about a quantity (⅓, 0.3, 33.3%).

In "Convert Percents to Fractions," students work with both theoretical and experimental probability as they use two different approaches to estimating likelihood in probability contexts.

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 offer multiple opportunities for students to engage in math, write about math, 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 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 "Combine Quantities to Make a Zero," the materials guide educators to help students write their definition of the term zero pairs within the "Solve It" section.

The materials require students to make sense of mathematics through multiple opportunities for students to discuss math with peers and educators. For example, in "Solve Percent Decrease Problems," the "Talk About It" activity guides students to "discuss what happens to the size of the markdown as the price of the dress increases. Ask: How much discount would you get on a $200 dress? On a $300 dress?"

6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	The materials do not provide educators with guidance on student 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 "Write Equivalent Expressions," students share whether an expression can have more than one equivalent (explain). The materials then ask students, "Swap with a peer and determine if there are equivalent expressions" (argument/justification). The "More Ideas" section models many different ways to write expressions (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, as well as suggested feedback to address misconceptions. For example, in "Determine Probability and Fairness," the "Look Out!" section states that students may "think that if an outcome is possible, it is as likely to occur as any other possible outcome." The section then offers guidance for educators to provide feedback to remedy student confusion, such as "help students realize that the area a section covers influences the probability that the spinner will land there."

The materials provide a consistent "Potential Misconceptions" section within each of the *Supplemental Guide*'s "Strand Overviews." For example, in the "Ratios and Proportions Strand Overview," the "Potential Misconceptions" section includes the statement that "students may believe that all straight lines indicate a proportional relationship, not realizing that the line must go through the origin to express a proportional relationship."

Additionally, the "Look Out!" section within each lesson highlights potential misconceptions students may have when approaching the content. For example, in "Find the Area of a Circle," the "Look Out!" section informs educators that students may "confuse the radius and the diameter of a circle" and "watch for students who think that means to multiply the length of the radius by two." In another example found in a lesson called "Convert Percents to Fractions," the "Look Out!" section states that "some students may add the 16% and the 33% and write the sum as 49%." The materials continue with suggested remedies to the anticipated misconceptions.