

### Accelerate Learning Inc.

Supplemental English Mathematics, 8 Math Nation+ Texas-Grade 8

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Supplemental	9798330805013	<b>Both Print and</b>	Static
		Digital	

#### **Rating Overview**

TEKS SCORE	TEKS BREAKOUTS	ERROR CORRECTIONS	SUITABILITY	SUITABILITY	PUBLIC FEEDBACK
	ATTEMPTED	(IMRA Reviewers)	NONCOMPLIANCE	EXCELLENCE	(COUNT)
100%	82	2	Flags Not in Report	Not Applicable	0

#### **Quality Rubric Section**

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	16 out of 23	70%
2. Progress Monitoring	13 out of 24	54%
3. <u>Supports for All Learners</u>	30 out of 39	77%
4. Depth and Coherence of Key Concepts	16 out of 16	100%
5. Balance of Conceptual and Procedural Understanding	38 out of 38	100%
6. Productive Struggle	21 out of 21	100%

#### **Breakdown by Suitability Noncompliance and Excellence Categories**

SUITABILITY NONCOMPLIANCE FLAGS BY CATEGORY	IMRA REVIEWERS	PUBLIC	Flags NOT Addressed by November Vote
1. Prohibition on Common Core	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	All criteria for guidance met.	5/5
1.1b	All criteria for guidance met.	3/3
1.1c	Materials do not include a diagnostic learning tool that connects skill entry points to the diagnostic results.	1/2
1.1d	All criteria for guidance met.	2/2
1.1e	Materials do not guide instructional leaders in supporting educators in implementation.	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) and English Language Proficiency Standards (ELPS). "The Lesson Alignment by Standard" and the "TEKS/ELPS by Lesson" are in "Course Overview 0" and the "State-Specific Resources" section of the *Teacher Edition*.

The "Unit Overview" summarizes the concepts covered and indicates whether the primary focus is building students' conceptual understanding, procedural fluency, or real-world application.

Vertical and horizontal alignment are shown in the Learning Pathways in the "Course Overview 0" section, the "Course Overview" section, and the *Teacher Edition*.

## 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.

Implementation Guidance is given for each component of the lesson in the "Course Overview 0," "Course Overview," and "Teacher Resources." Each of the program components is listed with an explanation and information on how it will be used during the lesson. Under the Flexible Implementation Options, the materials include time recommendations suggesting the time spent for each component and describing flexibility in the program design, with the materials offering the times as suggestions to teachers.

The materials provide usage recommendations to meet diverse student needs. The *Teacher Edition*, "Course Overview 0," Support for All Learners, includes information about intentional scaffolds designed to build student thinking and lead to mastery while filling in gaps. The materials provide language supports, including glossary videos, translated digital *Student Editions*, and instructional videos in English and Spanish. The Learning Pathways offer enrichment and extension suggestions within the course or by introducing future content. Accommodations are available through multiple accessibility features.

Effective educator practices are supported through "Teacher Resources" in the *Teacher Edition*, "Course Overview 0," and "Course Overview." The *Instruction Routines & Strategies* document gives educators multiple practices to use in the classroom setting. The "Teacher Prep Videos" provide educator support within each unit. The videos preview the lesson and provide information on implementation, challenges, differentiation options, and pedagogical notes.

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

The *TEKS Correlation Guide with Breakouts*, "Lesson Alignment by Standard," and "TEKS/ELPS by Lesson" enable educators to identify specific skills within certain units and lessons.

The "Product Review Guide" in the *Teacher Edition* under the "State-Specific Resources" section offers information about On-Ramp, the personalized, diagnostic learning tool. This adaptive diagnostic tool supports educators in meeting individual needs by ensuring that students have the prerequisite skills to master current course-level content.

Materials do not include a diagnostic learning tool that connects skill entry points to the diagnostic results.

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

Each unit includes an overview and rationale for the progression through the content. The overview and rationale support educators by allowing them to understand the learning sequence in the context of the learning progression.

The materials summarize each unit lesson, including an instructional focus (conceptual understanding, procedural fluency, or real-world application). A video for each lesson allows the educator to thoroughly internalize the lesson content, potential challenges, differentiation options, and pedagogical notes.

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

Comprehensive data reports on student usage and progress are provided. Instructional leaders have access to all educator resources.

There is no evidence of resources specifically designed for instructional leaders to support educators in implementing the materials as designed.

Materials are not explicitly labeled for instructional leaders.

#### 1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	Materials do not include detailed lesson plans; the assessment resources do not align with the ELPS.	3/7
1.2b	This guidance is not applicable to the program.	N/A
1.2c	All criteria for guidance met.	2/2
_	TOTAL	5/9

## 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.

There are no detailed lesson plans. *Math Nation*+ "Course Overview 0," "State-Specific Resources," and "TEKS/ELPS by Lesson" show the standards alignment by lesson to the TEKS and ELPS.

Educators can access the *Student Edition* (PDF) to see the learning objective for each lesson. The lesson framework is consistent throughout the resource and is structured using five components: Learning Targets, Guided Activity, Collaborative Activity, Practice, and Wrap-Up. Each lesson contains a Check Your Understanding in the *Student Edition*. The educator can use this information to know the specific student outcomes for each lesson, and once students complete the formative assessment, educators can track student progress. The materials follow a sequential unit format, but components can be used for instruction, intervention, or acceleration, giving the educator flexibility to meet the needs of students. The materials are flexible, and educators can use the components in any order. The "Course Overview" offers a suggested timeframe for each element of the lesson.

The "Course Overview" and "Teacher Resources" provide a general list of supplies and materials. However, the materials do not provide assessment resources aligned to the TEKS or ELPS. The materials include the assessments in the lessons, which are aligned to the standards in the "Lesson Alignment by Standard" and "TEKS/ELPS by Lesson."

## 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).

Materials contain supports for families in both Spanish and English. The materials include a "Course Resources" section that provides a "Family Support Letter" explaining how families can use the supports with students at home. Educators can print the letter from the *Teacher Edition* by accessing it digitally from the *Student Edition*. Students and families can access the "Study Expert" from the *Student Edition*, offering content support inside or outside of school. The materials support new academic vocabulary through a glossary video within the lesson.

### 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	Materials do not provide educator-controlled text-to-speech, or content	2/4
2.10	and language supports for individual students.	2/4
2.1d	Materials do not provide diagnostic assessments, including TEKS-aligned	0/4
2.10	tasks, varying complexity levels, or interactive item types.	0/4
2.1e	All criteria for guidance met.	4/4
	TOTAL	10/16

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

The materials provide clear and explicit definitions for formative and summative assessments and their intended purposes. The materials explain formative assessments as "continuously informing instruction as students learn and practice." In contrast, summative assessments "assess student understanding at the end of an instructional period."

A table outlines when and how educators may use each type of assessment and where they may locate it within the program. The "Data Analysis and Progress Monitoring" subsection clarifies the purpose of each type of assessment and how educators can use them to monitor student progress.

The "Product Review Guide" defines On-Ramp as a personalized, adaptive diagnostic tool, further supporting assessment use tailored to individual learning needs.

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

The EdgeXL platform allows teachers to customize a set of instructions, ensuring consistency across the testing groups. The Check Your Understanding and Test Yourself! components are embedded in each lesson or unit, standardizing the experience across classrooms and ensuring every student engages with the assessments under similar conditions. Implementation guidance is given for instructional assessments, ensuring all students complete them at the same point in the instructional framework.

## 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 Ticket Out the Door, Error Analysis, Warm-Ups, and Bell Work are all available in the *Teacher Edition* and *Student Edition* in both print and digital formats. EdgeXL is an assessment generator tool with additional assessment questions aligned to each unit and lesson and can be used to create additional assessments for various use cases.

The materials include educator-controlled calculator settings. Teachers can select which calculator(s)—basic, graphing, or scientific—students are permitted to access, or they may opt to disable calculator access entirely. This feature allows educators to customize calculator availability based on individual student needs and instructional goals. The resource offers various supports for learners, including language selection, highlighters, screen reader functionality, adjustable background and font colors and styles, and UserWay Works accessibility tools. The materials do not provide clear evidence of accommodations for educator-controlled text-to-speech or content language supports.

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

The materials have limited access to the On-Ramp diagnostic platform, and it was not evident that there were varying complexity levels of questions, nor was there a clear connection to the TEKS.

Diagnostic assessment questions include only multiple-choice questions.

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

Formative assessments are available and present more than two levels of complexity. Tasks progress in difficulty—from guided practice using visual supports or tables to independent problem-solving requiring students to apply concepts without scaffolds. This structure supports diverse learner needs.

The materials include interactive item types within the formative assessments. The materials present multiple choice, text entry, drop-down menus, select all that apply, and structured response tables. These formats appear primarily in digital tools like Check Your Understanding and Wrap-Up activities. More than two unique interactive item types were available, demonstrating intentional variety in assessment design.

#### 2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	Materials do not provide guidance for interpreting student performance or	0/3
2.20	rationales for responses.	0/5
2.2b	Materials do not offer guidance on responding to trends in performance.	0/1
2.2c	All criteria for guidance met.	2/2
2.2d	Materials do not provide prompts to support educators in checking for	1/2
2.20	understanding.	172
2.2e	This guidance is not applicable to the program.	N/A
_	TOTAL	3/8

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

The materials provide ample opportunities for formative assessment and progress monitoring, such as those embedded in Check Your Understanding and through the EdgeXL assessment system. The materials do not offer scoring information and clear guidance for interpreting student performance. For example, reports generated through the coursework report and EdgeXL provide data on student trends, but the reports lack detailed scoring rubrics or instructional next steps tied to assessment outcomes.

The Test Yourself! practice tool includes solution videos explaining the rationale for correct responses. The materials include videos to help students review the mathematical processes necessary to arrive at correct answers after independently attempting the problems. This support in the materials is limited to specific assessments, does not consistently include rationales for incorrect responses, and is not designed for use by educators in analyzing performance.

Immediate feedback is provided for some digital assessments, such as Check Your Understanding, identifying correct or incorrect responses. The materials do not provide rationales that accompany answers, and no documented instructional guidance suggests how teachers should interpret or respond to specific patterns in student performance.

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

The materials support flexible implementation, but there is no apparent connection between assessment data and targeted instructional activities. The materials do not provide educators with structured pathways or recommendations on adjusting instruction or selecting tasks based on observed trends in student performance.

The materials include assessments such as Check Your Understanding, and tools like EdgeXL to monitor progress. The materials do not instructionally guide educators by identifying or responding to patterns of misunderstanding or learning gaps.

### 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 EdgeXL platform features dashboards and digital reports that allow teachers to monitor student usage, coursework completion, assessment results, and overall performance trends. The materials integrate these tools throughout the digital platform, inform instructional decisions, and support classroom data analysis.

The materials include tools for teachers and students to track progress and growth. Teachers can assign activities in EdgeXL and review student performance, including incorrect responses, to inform instructional adjustments. Students track their learning through Check Your Understanding at the end of lessons and Test Yourself! at the end of units, providing immediate feedback after each attempt. Additionally, a resource template in Unit 0 supports students in showing their work, reflecting on errors, and using solution videos to monitor progress over time. These features provide opportunities for teachers to monitor growth and for students to take ownership of their learning.

## 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.

Each lesson includes a Check Your Understanding component as an embedded formative assessment tool. Check Your Understanding assesses comprehension by being placed at key points during instruction. Check Your Understanding allows educators to address misconceptions in real time before the misconception interferes with student learning.

"Teacher Prep Videos" help teachers recognize when and how to implement Check Your Understanding. This guidance encourages the proactive use of Check Your Understanding and other formative assessment strategies during instruction.

General guidance is present through the videos, but explicit prompts—such as specific questions, scripts, or teacher cues embedded in the instructional text—are not included.

## 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	Materials do not provide educator-controlled text-to-speech or content and language supports for individual students.	1/3
3.1e	All criteria for guidance met.	2/2
_	TOTAL	10/12

## 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.

Each lesson embeds research-based scaffolding practices through the Collaborative Activities and the Guided Activities. These include scaffolded questioning, intentional discussion points, and guided notes to build conceptual understanding and gradually release responsibility to students in the "Practice." The materials emphasize the "how" of learning by highlighting students' cognitive steps to access and master the content.

The "Teacher Prep Videos" include detailed scaffolds, such as guided questioning, targeted discussion prompts, visual models, graphic organizers, word banks, and annotated student samples. These tools equip educators with strategies to support students in developing understanding when foundational skills are weak or incomplete.

For example, in the *Teacher Edition* "Answer Key" for Unit 5: Lesson 1 "Practice," teachers are given guidance within the video, as students start graphing proportional relationships, to ask students what the points on the graph represent. Students work with visual representations to make sense of the problem situation. Using a visual model, the teacher is guided to prompt students to verbalize their interpretation of the points.

Adaptive digital tools, such as On-Ramp, utilize diagnostic technology to personalize instruction based on individual student needs, ensuring that learners can revisit prior concepts or accelerate their progress as needed. Students can also engage with "Study Expert Videos," which offer alternative pacing and depth, further supporting differentiated access to the content.

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

New academic vocabulary is intentionally introduced within the context of lessons. The materials have a structured approach that ensures educators deliberately teach vocabulary as part of concept development. The materials mark academic vocabulary within green boxes that signal the important terms.

Instructional supports guide pre-teaching unfamiliar references. For example, the *Teacher Edition* "Answer Key" includes blue boxes to identify and explain unfamiliar references and key ideas. This helps teachers anticipate and clarify potentially confusing content before students engage.

The materials foster academic language development through structured opportunities for student dialogue, encouraging learners to use academic vocabulary in partner and group discussions. This supports opportunities for vocabulary acquisition and oral language fluency in mathematical contexts.

## 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 support educators in identifying enrichment and extension opportunities within the current course and introducing above-grade-level content as referenced in the Learning Pathways. For example, if students have successfully completed Unit 6 "Solving Multistep Equations" in grade 8, educators can direct students to Unit 5 "Linear Equations" in Algebra 1.

Videos provide instructional support for students ready to advance, offering flexible guidance as they move through more complex material independently.

## 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 materials include educator-controlled calculator settings. Teachers can select which calculator(s)—basic, graphing, or scientific—students can access, or teachers can opt to disable calculator access entirely. This feature allows educators to customize calculator availability based on individual student needs and instructional goals.

Materials do not include educator-controlled accommodations for text-to-speech or content and language supports within the digital platform. While these features are available to students, educators cannot enable or disable them to support individual student needs.

## 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 provide multiple opportunities for students to demonstrate understanding through various interactive item types, including multiple-choice, text entry, and drop-down responses. For example, in Unit 1: Lesson 1, the Check Your Understanding section offers three distinct question formats that assess student understanding through different representations.

Educator guidance is embedded throughout the curriculum to support varied student expression, including written responses, visual models, real-world applications, and manipulative usage. Teacherfacing resources, such as "Answer Keys," prep videos, and instructional prompts, help students express and represent their thinking.

Lesson designs intentionally incorporate mathematical process standards, providing built-in opportunities for students to perform, express, and represent ideas. Activities, such as Guided and Collaborative Activities, are structured to ensure students analyze relationships, communicate reasoning, and apply learning to authentic contexts.

#### 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.

"Teacher Prep Videos" guide educators in activating prior knowledge. For example, Unit 1: Lesson 1 prompts teachers to explore different ways of converting rational numbers, allowing students to choose the best strategy based on prior learning.

The materials anchor big mathematical ideas by structuring lessons around core concepts, supported by Collaborative Activities, and educator explanations. The materials highlight and connect key patterns, features, and relationships using varied representations—the materials guide educators in allowing students to work collaboratively to determine multiple ways to represent rational numbers and then allowing them to determine the most efficient strategy. Educator resources such as "Teacher Prep Videos," "Answer Keys," and the "Course Overview" explicitly reference how and when to introduce concepts, reinforce mathematical language, and use visual supports like posters and class-made anchor charts.

The materials provide explicit guidance for educators to activate prior knowledge and anchor big ideas. In Unit 1: Lesson 1, the "Teacher Prep Video" prompts educators to begin by exploring how students already know how to convert between fractions, decimals, and percents. Educators then guide students in reviewing and applying multiple strategies for rewriting rational numbers in different forms, anchoring the big idea that numbers can be represented in many ways depending on context. The "Course Overview" outlines how these concepts build across lessons and units to reinforce deeper understanding. The materials prompt educators to highlight and connect key patterns and features using multiple representations. For example, in Unit 1: Lesson 1, the "Teacher Prep Video" supports educators in helping students match phrases with different strategies for rewriting rational numbers. Then, students are asked to convert using a different method from their original match. This helps students recognize features and patterns across equivalent number forms. The video reinforces that by grade 8, students should begin to consider which strategy is most efficient, emphasizing mathematical reasoning. The

materials guide educators to highlight and connect key relationships across models and concepts through structured activities and teacher support. In Unit 5: Lesson 5, students encounter different representations of linear functions, and educators guide them in determining slope. Throughout Unit 5, educators connect key concepts of linear relationships to build knowledge.

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

The "Teacher Prep Videos" guide educators through various instructional strategies, including modeling, guided practice, and collaborative problem-solving. For example, in Unit 1: Lesson 1, students practice rewriting rational numbers in equivalent forms and discussing strategies with a partner before they move to independent practice.

The "Course Overview" and Instructional Routines & Strategies document recommends several methods, such as direct instruction, math talks, think-pair-share, number sense routines, and station-based learning to deliver content and encourage student reasoning. In Unit 4: Lesson 5, the "Teacher Prep Video" provides clear guidance for delivering instruction through multiple instructional approaches. The materials begin with a Collaborative Activity where students work with a partner to relate lengths of the legs of a right triangle to distance on a coordinate plane. Next, students engage in a Guided Activity where the educator models using the Pythagorean Theorem to find the length of the hypotenuse and the lengths of the legs to determine the perimeter of the triangle. The lesson concludes with an independent practice activity, where students practice plotting points, drawing right triangles, and determining the area of the triangles. These components support lesson delivery through direct instruction, visual modeling, collaborative learning, and independent practice. The flexible lesson design allows teachers to adjust pacing and sequence. While specific timing is not mandated, the materials offer planning guidance and suggest various strategies for teachers to choose based on their instructional model. The "Teacher Resources" section includes clear implementation guidance to help educators make instructional decisions based on student needs. For example, the materials prompt teachers to preview the warm-up and decide whether it is appropriate for launching the lesson. They also advise teachers to monitor student progress and, if many students are struggling at the same point, pause the activity to provide support. These prompts help teachers tailor lesson components in real time to support effective instruction.

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

The materials incorporate multiple types of practice, including Guided Activity, Collaborative Activity, and Practice. For example, Unit 5: Lesson 5 provides students with multiple opportunities to practice. The lesson begins with a teacher-led activity that models how to use similar triangles to find the slope of a line. As the teacher models, students are guided to complete tasks and prompted to check answers with a partner. Students then work with peers in a Collaborative Activity, practicing finding the slope of a line

from graphs. Teachers then lead students through another Guided Activity where they find the slope from graphs and tables. Finally, students complete independent practice finding slopes from graphs and tables.

The materials also support varied instructional structures, offering implementation guidance for individual work, pair activities, small group instruction, and whole-class facilitation. The *Implementation Guide* outlines when and how to apply these models across lesson phases. Unit 5: Lesson 5—the "Teacher Prep Video"—guides educators through two teacher-led activities with one Collaborative Activity in the middle. This structure allows students to participate as the teacher models as well as peer-to-peer support while acquiring new learning. The video supports teachers with scaffolded questions and questions that direct students to the desired learning outcomes.

The "Teacher Prep Videos" provide consistent educator guidance on effectively delivering multi-tiered interventions. These videos model instructional delivery and suggest when to use teacher-led instruction, partner collaboration, and independent tasks to meet varying student needs. For example, Unit 5: Lesson 5—the "Teacher Prep Video"—reminds teachers that they will be making connections to the previous lessons where students were exploring slope and will now begin to formalize the learning by using the slope formula. The lesson begins with a Guided Activity where the teacher models how to write the slope of a line using the legs of a right triangle on a graph. The teacher is guided to show students how to write the ratio of the vertical length to the horizontal length and models how to use the coordinates on the graph to find the length. The video models the appropriate language to use, such as "change in y over the change in x," and how this relates to the length of the vertical leg over the length of the horizontal leg. The teacher-led activity includes modeling and guiding students to make a conjecture. The video then directs educators to transition into a scaffolded Collaborative Activity, where they analyze two different students' work to further formalize the concept of slope. The video also suggests questions to ask to ensure students have analyzed the student work correctly. Teachers lead students through one more Guided Activity, modeling how to find the slope between two points on a line using the slope formula. Finally, students complete self-paced independent practice to develop mastery.

## 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 that support various forms of student engagement. Learning Pathways in the "Course Overview" identify opportunities for students to explore advanced concepts or progress to future content.

For example, students could move from grade 8: Unit 5 "Linear Relationships" to any of the first four units in Algebra 1 to study these relationships at an extended level. "Study Expert Videos" support students who are ready to move ahead independently.

The *Instructional Routines & Strategies* guide in the "Teacher Resources" section offers general strategies for implementing enrichment and includes a rationale for what each routine accomplishes and why it is Texas Instructional Materials Review and Approval (IMRA) Cycle 2025 Final Report 11/01/2025

Accelerate Learning Inc., Supplemental English Mathematics, 8, Math Nation+ Texas-Grade 8

important. For example, the guide describes Algebra Talks as routines that promote mathematical discourse and encourage students to explore multiple solution paths. These routines support various forms of engagement. The materials include activities, such as Wrap-Ups or real-world applications, that present opportunities for enrichment. The Learning Pathways, "Course Overview," and Support for All Learners information in the *Teacher Edition* Unit 0 was accepted as evidence for meeting this criterion. Teachers have guidance on how to use the materials to differentiate instruction through these resources and the "Teacher Prep Videos" available for each lesson.

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

The "Teacher Prep Videos" embed formative assessment questions and explicitly direct educators to pause, debrief, and prompt discussion at key moments in the lesson, ensuring timely feedback aligned to student thinking. For example, in Unit 1: Lesson 1, educators are prompted during the Collaborative Activity to, "Remind them that percent means it has a denominator of 100 because it is per 100." The *Implementation Guide* provides guidance for using lesson activities for informal assessments and offers examples of when and how to adjust instruction based on student responses during or after a component. The "Teacher Prep Video" offers specific guidance with questions to ask during the activities of how to convert fractions, decimals, and percentages. The video also provides guidance for educators to guide students to using the most efficient method by asking them to write fractions with a denominator of 100 when possible.

Guidance directs educators to give feedback on student strategies and to debrief throughout the lesson. Educators can use the Practice to determine the level of competency the students have achieved. This will allow them to clear up misconceptions by asking questions and providing students with feedback before proceeding to the Ticket Out the Door.

#### 3.3 Support for Emergent Bilingual Students

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

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.3a	Materials do not include guidance on providing or incorporating more than	2/4
3.34	two levels of academic language.	2, .
3.3b	This guidance is not applicable to the program.	N/A
3.3c	The product does not offer explicit support to guide educators in	0/1
3.30	supporting students in language acquisition.	
3.3d	Materials do not support building background knowledge or making cross-	4/8
3.3u	linguistic connections through oral or written discourse.	4/0
3.3e	This guidance is not applicable to the program.	N/A
_	TOTAL	6/13

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 guidance addresses the needs of English learners at two proficiency levels, as outlined in the ELPS. Beginning-level students benefit from translation tools and multilingual glossary videos in English, Spanish, Haitian Creole, Portuguese, and ASL. Intermediate learners are supported through scaffolded questioning that progresses from dropdowns to open-ended responses. However, the materials lack explicit guidance for more than two proficiency levels. There are no tiered sentence stems or differentiated tasks aligned with ELPS descriptors, limiting the educator's ability to fully support all proficiency levels.

Multilingual supports include glossary videos in five languages, diverse *Study Experts Videos*, and digital tools such as built-in translation (in over 100 languages). These supports allow students to access and practice academic language at their proficiency level.

Lessons model and scaffold academic language through oral instruction, labeled diagrams, and cooperative learning, giving students at all proficiency levels meaningful opportunities to speak, write, and apply increasingly complex language. Throughout lessons, students internalize academic language through speaking and writing tasks, engage in partner activities, respond using high-frequency vocabulary, and observe step-by-step modeled processes with embedded scaffolds and checks for

understanding. For example, in Unit 4:	Lesson 4, as learners use	the Pythagorean Theo	rem, they learn
new language structures, expressions,	and basic and academic	vocabulary heard durin	g guided and
Collaborative Activities. A video describ	ing the Pythagorean The	orem is available in the	Student Edition in
five languages. Learners use a word ba	nk to complete a stateme	ent and formalize the d	efinition of the
Pythagorean Theorem. "For any right tr	iangle, the	is the side	the
right angle. It is always the	side of the triangl	le. The a	are the sides that
the right angle. They a	re always each	the	In the
Pythagorean theorem, the hypotenuse	is represented by the va	riable, while the leg	s are represented
by the variables and" The wo	ord bank supports stude	nts linguistically and he	lps students with
language acquisition. Students are also	asked to discuss why ce	rtain values in the Pytha	agorean Theorem
are interchangeable.			

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.

The materials identify the ELPS for each lesson in the "TEKS/ELPS by Lesson" document; however, they do not include guidance to support educators in using the materials effectively within state-approved bilingual or ESL programs. The *Instructional Routines & Strategies* guide includes Math Language Routines (MLRs). An example of an MLR is "Stronger and Clearer Each Time." The purpose of this strategy is for students to have the opportunity to revise and refine ideas both verbally and in writing. Although strategies are provided, the resource does not support teachers with guidance as to when to use the strategies, nor does it provide step-by-step guidance aligned to state-approved bilingual or ESL frameworks.

## 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 materials include embedded guidance to help teachers support emergent bilingual (EB) students in developing academic vocabulary and improving comprehension through oral and written discourse. Lessons offer structured opportunities, such as academic conversations, partner activities, word problems, and writing prompts. In Unit 3: Lesson 1 "Powers of 10," the materials use oral prompts with diagrams to help students connect number value with place value. Students work with a partner to discuss these relationships, which supports the use of academic vocabulary through oral discourse. The

materials then prompt students to make a conjecture about a mathematical statement involving exponents and explain their reasoning in writing, supporting academic vocabulary development through written discourse.

The *Instructional Routines & Strategies* guide outlines targeted strategies in the "Math Language Routines" section that support oral and written language development. For example, the Compare and Connect procedure helps students understand how different math ideas or strategies relate. It encourages students to notice, compare, and explain various problem-solving methods using math language. It also encourages them to talk and think more deeply about math. For example, in Unit 3: Lesson 1 "Powers of 10," the academic vocabulary is modeled using oral prompts and diagrams. Students work with a partner to compare answers and then discuss which mathematical statements could and could not be written as powers of 10 and then summarize their findings. This procedure builds mathematical thinking, helps students understand multiple processes, and strengthens their math vocabulary.

The materials do not provide sufficient evidence of embedded guidance to build background knowledge through oral or written discourse. There are no clear strategies that promote cross-linguistic connections, such as leveraging students' home languages or identifying cognates.

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 provide practice opportunities intentionally embedded in every lesson and designed to support students' conceptual understanding and long-term retention of mathematical knowledge. According to the "Student Lesson Design" section, these practice activities include Warm-Ups, Collaborative Activities, and Practice components, which are structured to match students' progression, from guided to independent work. These tasks often require students to solve problems, use academic language, and apply multiple strategies to understand grade-level TEKS comprehensively. For instance, in Unit 1: Lesson 1, students determine equivalency in all three forms (fraction, decimal, percent), rewrite a fraction to a decimal without answer choices, and select an equivalent percent when given a fraction.

Instructional assessments are integrated throughout learning pathways and consistently require students to demonstrate deep understanding aligned with TEKS. These assessments include tools such as Check Your Understanding, Test Yourself!, Warm-Ups, and the customizable EdgeXL Item Bank. Students' ability to model, explain reasoning using academic language, interpret mathematical representations, and apply learned concepts in real-world scenarios is assessed. Examples, from Unit 1—Rational and Irrational Numbers, demonstrate scaffolded student learning from conceptual rational number equivalents to understanding squares and square roots, and then to approximating irrational numbers. This progression ensures a conceptual foundation before moving to procedural algorithms.

## 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 provide a coherent system of questions, tasks, enrichment, and extension opportunities that progressively increase rigor and complexity, fostering grade- and above-grade-level proficiency in alignment with the TEKS.

Questions and tasks within each lesson are structured to grow in complexity, promoting conceptual understanding and the development of grade-level proficiency. For example, in Unit 1: Lesson 1, Check Your Understanding requires students to determine the equivalency in all three forms, rewrite a fraction to a decimal without answer choices, and select an equivalent percent when given a fraction using academic language. These activities require higher-order thinking and the application of multiple strategies, increasing in rigor as students progress through the lesson. The materials include intentionally designed components to scaffold students toward mastery, using structured formats such as Warm-Ups, Check Your Understanding, and guided practice elements.

The enrichment and extension materials provided through Learning Pathways support continued academic growth for students performing at and above grade level. Located in the "Course Overview," the Learning Pathways clearly articulate horizontal and vertical content connections, allowing educators to identify opportunities for remediation, acceleration, and cross-grade-level exploration. The materials supplement these pathways with features such as "Study Expert Videos," which guide learners at varying paces and depths. The materials also offer students working ahead independently instructional support, facilitating above-grade-level engagement.

#### 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	All criteria for guidance met.	4/4
_	TOTAL	6/6

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

The course sequence builds foundational skills early in the year and intentionally connects them to more complex applications in later units. For example, early units focus on whole-number operations. In contrast, subsequent units build on these concepts through work with decimals, fractions, rational numbers, and coordinate geometry, demonstrating a clear progression in both content and cognitive demand.

The Learning Pathway reinforces these horizontal connections. These tools help identify conceptual links between topics and clarify how ideas introduced in one unit are developed and extended in others.

The Learning Pathways explicitly map the relationships among key mathematical ideas within the grade level, helping to reinforce the coherence of instruction and support deeper understanding through consistent revisiting, and application of core concepts.

## 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 Learning Pathways highlight how mathematical content develops over time, showing connections within a single grade level and across multiple grade bands. Educators use these tools to identify prior knowledge, plan for remediation, or accelerate learning based on individual student needs.

Visual elements such as arrows and color-coded blocks within the Learning Pathways represent how specific units and concepts build upon each other from one grade to the next. This structure helps educators and students track the vertical progression of key mathematical ideas and ensures that instruction supports the cumulative development of skills.

The materials include references to repeated revisiting of TEKS-aligned standards across grades, as noted in the alignment tools for grade 8. These references show how concepts introduced in earlier grades are reinforced and expanded upon in later instruction.

## 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.

"Teacher Prep Videos" model how educators can link familiar concepts, such as using area models from multiplication to support understanding of division, to the new content the materials introduce. The materials do not specifically reference prior knowledge in the lessons but do present the previous knowledge in the videos.

The materials make conceptual and procedural connections across grade levels using Learning Pathways. These pathways offer visual representations that trace the development of mathematical ideas both within the current grade level and vertically into future grade levels, supporting coherence across the grades 6–12 continuum. For example, students in grade 6 begin writing expressions and equations to represent mathematical relationships with independent and dependent variables, then move to grade 7 where they represent proportional relationships, and then move to grade 8 where they represent proportional and non-proportional relationships.

The "Lesson Alignment by Standard" provides guidance to help educators make horizontal and vertical connections, reinforcing students' understanding of procedures learned in earlier grades while preparing them for the increasing complexity of future mathematical work.

#### 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 are designed to revisit key mathematical processes and practices over time within lesson structures that integrate previously learned skills into new learning experiences. The materials also revisit key mathematical processes and practices over time through embedded scaffolds that require students to draw upon earlier knowledge. These opportunities occur within individual lessons, and the materials distribute these opportunities across units and grade levels.

Check Your Understanding is strategically placed to promote frequent recall of previously learned content. These checks serve as formative assessments and mechanisms for reinforcing earlier skills in new contexts, promoting cumulative learning and conceptual fluency.

The Learning Pathways and "Lesson Alignment by Standard" section further support spaced retrieval by demonstrating how the materials revisit TEKS-aligned standards across multiple units and grade levels. This vertical and horizontal integration ensures that students are not only exposed to concepts once but return to them repeatedly through different lenses and increasing levels of complexity. For example, grade 7, Unit 10: Lesson 2 develops the conceptual understanding of the constant of proportionality. Grade 8 moves students toward procedural fluency and real-world application of proportional relationships and slope.

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

The materials focus on student engagement's "what" and "how," intentionally incorporating mathematical processes and practices throughout lessons. These design features promote interleaving by integrating prior content within new tasks and assessments.

Check Your Understanding and Test Yourself! allow students to draw on previously learned material across different topics. These tools embed multiple concepts within a single activity or assessment, allowing mixed practice that reinforces conceptual connections.

Interleaving appears in lessons that combine multiple content strands, such as operations with rates, ratios, and proportions. Students solve problems with rates, ratios, and proportions in grade 7 and then move to representing proportional relationships and then to linear relationships in grade 8. Students are

encouraged to use various previously learned strategies as they encounter increasingly complex tasks, particularly as lessons progress through the unit or course.	

### 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 intentionally balance conceptual understanding, procedural fluency, and real-world application. Each lesson is labeled by focus to help educators identify learning goals quickly: Conceptual (C), Fluency (F), or Application (A). The design prompts students to interpret and apply mathematical concepts in authentic, complex contexts.

Lesson tasks provide frequent opportunities for students to interpret data, analyze relationships, and evaluate mathematical strategies. For example, Unit 4: Lesson 4 solves real-world problems involving the Pythagorean Theorem, where students determine how much shorter a trip would be if a person cuts through a park.

Educator resources, including "Unit Overviews" and "Lesson Summaries," clearly show how each lesson supports higher-order thinking. These tools help educators select activities encouraging reasoning, reflection, and real-world application.

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

The materials provide frequent opportunities for students to create concrete models and mathematical representations, embedding these opportunities throughout Lesson Tasks and Practice activities.

The Independent Skills Practice (ISPs) allows students to create models and representations. For example, in "Skill B-5," students model and solve one-variable equations that represent mathematical and real-world problems.

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

The materials consistently prompt students to apply conceptual understanding to new and varied contexts through Warm-ups, Practice Tasks, and Collaborative and Guided Activities.

Warm-ups at the start of each lesson are intentionally designed to give all learners access by using engaging or unfamiliar scenarios to encourage students to use prior knowledge and make new connections.

The materials include structured tasks with multiple representations and scaffolds, ensuring accessibility while challenging students to extend their learning into real-world or unfamiliar situations.

#### 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 Warm-Ups, described in the "Product Review Guide," help students prepare for new content or reinforce number sense and procedural fluency. Each lesson has a designated focus—Conceptual Understanding (C), Procedural Fluency (F), or Real-World Application (A), as outlined in the "Unit Overview." This structure helps educators intentionally target fluency-building tasks when appropriate. For example, in Unit 1: Lesson 1, students are exposed to multiple activities where they must convert a fraction to a decimal and then decimals to percentages. Students are required to show their work each time.

The lessons are designed to support automaticity. Lesson tasks consistently include scaffolded activities that help students build the fluency needed for grade-level success. For example, Unit 1: Lesson 1 builds automaticity through repeated exposure to converting between fractions, decimals, and percentages. Students develop automaticity by retrieving spiraled concepts involving division.

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

The materials provide multiple opportunities for students to practice applying efficient, flexible, and accurate mathematical procedures. Lessons support efficiency by modeling streamlined strategies, and the "Study Expert Videos" help students make direct connections to solve problems quickly.

The materials encourage flexibility by offering multiple solution paths and allowing students to choose from various models and strategies. "Teacher Prep Videos" guide educators in adapting instruction based on student needs. At the same time, the product's student-centered structure allows teachers to use complete lessons or select components to support individual learners best.

Lessons reinforce accuracy by including scaffolded tasks that build automaticity and procedural fluency. Guided and Collaborative Activities allow students to refine their approach, receive feedback, and apply precise methods.

## 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 consistently provide opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy throughout learning pathways. "Study Expert Videos" and "Teacher Prep Videos" embed reflective prompts to guide students in assessing the efficiency and flexibility of their problem-solving methods, such as "Is this the fastest way?" or "What other method could work?"

The materials guide learners to consider accuracy by responding to questions like "How do you know the answer is right?" These prompts appear during Collaborative and Guided Activities and Independent Practice, reinforcing accurate reasoning and solution validation.

The material guides the teacher to help students make connections to ensure efficiency, and working with a partner allows them to ensure accuracy. In Unit 5: Lesson 4, students begin by comparing vertical and horizontal side lengths of several triangles that share a hypotenuse along the same line. They use this hands-on, visual approach to calculate and simplify ratios, and then collaborate to construct a conjecture about the relationship between the side lengths, effectively defining slope. Later, students use these visual models to transition to a symbolic definition of slope. In small-group and partner activities, they explain their models, analyze multiple triangles to confirm that slope is constant, and discuss proportionality in relationships. These opportunities for modeling and collaborative reasoning help students internalize the abstract concept of slope by directly linking hands-on and visual strategies to numeric and symbolic forms.

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

The materials provide clear guidance to help students select increasingly efficient approaches for solving mathematics problems. Across lessons, "Teacher Prep Videos" and "Study Expert Videos" support both educators and students in evaluating the efficiency of different strategies. For Grade 8 students in Unit 1: Lesson 1, timely feedback is given to learners when they cannot easily write fractions with denominators of 100 to convert to a decimal first.

The "Teacher Prep Videos" help educators model efficient problem-solving techniques and anticipate potential misconceptions. These videos also guide teachers in delivering feedback that directs students toward more effective solutions. This scaffolding helps students internalize how and why specific approaches work better in different contexts. For example, in Unit 1 Lesson 1, educators are guided through a lesson that opens with a Collaborative Activity where students explore multiple strategies for converting fractions to decimals. The video highlights two student approaches—one dividing the numerator by the denominator, and another rewriting the fraction with a denominator of 100 to leverage

place value. The teacher is prompted to validate both strategies as mathematically sound, helping anticipate a common misconception: that only one method is correct. The video emphasizes helping students evaluate which method is most efficient depending on context. Additionally, when students match conversion tasks with strategies and then choose alternative strategies in Part B, the teacher is coached to guide them in reflecting on strategy choice. This prepares educators to scaffold learning by prompting metacognitive thinking about the efficiency and appropriateness of various problem-solving techniques.

The "Product Review Guide" reinforces these practices by highlighting tools that help monitor student progress and tailor instruction toward more efficient strategies. Overall, the materials actively build students' ability to recognize, evaluate, and apply increasingly efficient mathematical problem-solving methods. For example, in Unit 1: Lesson 1, students practice rewriting rational numbers into equivalent forms by converting among fractions, decimals, and percentages using multiple strategies. For instance, the Guided Activity includes a matching task where students pair strategies, "divide the numerator by the denominator" with specific conversion goals, "to rewrite a fraction as a decimal". Students are also prompted to generate alternative strategies for converting between forms, reinforcing the idea that problems can be approached in more than one valid way. Throughout the lesson, structured tables guide students in showing their work and justifying their conversions, helping teachers monitor students' conceptual understanding and identify where targeted support may be needed. The wrap-up activity includes a "confidence level" rating alongside each conversion problem, giving students the opportunity to self-assess their efficiency and accuracy. This supports metacognitive reflection while giving teachers insight into students' evolving proficiency with increasingly efficient problem-solving techniques.

#### 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 they address the conceptual and procedural emphasis of the TEKS. Each lesson has a designated focus—Conceptual Understanding (C), Procedural Fluency (F), or Real-World Application (A), as outlined in the "Unit Overview." This labeling helps teachers align instruction with the intent of the TEKS and supports effective planning.

The *Texas Standards Alignment* document identifies Unit 5 "Linear Relationships" as a target content standard for TEKS 8.4 B and C. These lessons develop a conceptual understanding of the unit rate as the slope and build to procedural fluency using the slope formula. For example, in Unit 5: Lesson 2, students explore proportional relationships through real-world contexts like frozen yogurt pricing and fundraising scenarios. The lesson begins by having students determine whether price-to-weight ratios are equivalent, supporting conceptual understanding of proportionality and the constant of proportionality (unit rate). Students then analyze a graph of the data and identify the unit price per ounce, interpreting it as the slope of the line. Later, they label components of the equation y = cx, where c represents the constant of proportionality. In a collaborative car wash activity, students graph the relationship between the number of cars washed and money raised, derive the equation m = 8.50c, and interpret the slope as \$8.50 per car, linking back to the focus on applying the slope formula to real-world problems. These repeated applications across contexts help build both conceptual understanding and procedural fluency with slope.

## 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 include questions and tasks that prompt students to use concrete and pictorial models. In Unit 1: Lesson 4, "Students investigate perfect squares using area models and graphing equations involving squares." Students use concrete and pictorial models to build a deep conceptual understanding of perfect squares and square roots. Early in the lesson, students physically draw and label squares with areas from 1 to 25 square units on a grid, using square units as visual and tangible models of squared values. This activity connects the abstract operation of squaring a number to a concrete geometric representation of area. As students compare and discuss their drawings with peers, they construct the idea that squaring a number means forming a square with equal-length sides and computing its area.

Lessons incorporate pictorial models, including diagrams and visual models, to deepen understanding. For example, in Unit 4: Lesson 5, students graph right triangles with given vertices, then determine the lengths of the horizontal and vertical legs by calculating the difference in x- or y-values. These visual models allow students to see and quantify horizontal and vertical change, reinforcing their understanding of slope as a ratio of rise over run. Students draw a right triangle and apply the Pythagorean Theorem using the side lengths visible on the graph. These diagrams help make abstract numerical relationships concrete, supporting reasoning about side lengths, distances, and perimeter in visual and spatial ways. By consistently referencing and labeling coordinate planes, students engage with mathematical concepts not just numerically, but through visual representations that support conceptual connections across geometry and algebra.

The materials support abstract modeling by guiding students to approximate irrational numbers and locate them on the number line in Unit 1: Lessons 8 and 9. These tasks develop students' ability to reason symbolically, in alignment with the TEKS. For example, students engage in tasks that guide them to identify, approximate, and symbolically reason about irrational numbers such as the square root of 13 and 116. Students estimate the square root of 13 by analyzing its placement between whole numbers, comparing its distance to values like 3.6 and 3.7, and then plotting it on a number line. They then use these approximations to evaluate and locate expressions of operations with irrational numbers, reinforcing their understanding of how irrational values behave in operations.

## 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 support students in connecting, creating, defining, and explaining both concrete and representational models to abstract concepts. Each lesson follows a structured progression, beginning with hands-on modeling and moving toward symbolic representations. Expert videos, collaborative work, and guided activities help students make these connections. For example, in Unit 7: Lesson 2, the materials guide students through a hands-on exploration of rigid transformations using lines and angles. The lesson begins with a Guided Activity where students match real-world movements like slides, flips, and spins to mathematical terms: translation, reflection, and rotation. These activities help students connect physical motion to abstract geometric concepts. The Collaborative Activity prompts students to draw segments and translate them on graph paper. They use arrows to show how each point maps from one location to another. This modeling supports students in visualizing how transformations preserve distance and angle measures. Students then use tracing paper to manipulate angles and verify properties through rotation and reflection. They move from drawing and folding to reasoning about how angle measures remain unchanged. These activities help students connect physical actions to symbolic representations. Throughout the lesson, the materials support a clear progression from hands-on modeling to abstract reasoning. Students experiment with hands-on modeling, engage in peer discussions, and complete tasks that reinforce conceptual understanding and a progression towards symbolic representations.

Students use models to build abstract understanding. For example, in Unit 7: Lesson 2, students simulate the movement of a plane on graph paper to identify transformations. In Unit 2: Lesson 7, students match expression cards with exponent law and value cards, helping them connect exponent rules to numeric expressions.

Representational models are linked to abstract concepts through vocabulary and visual mapping tasks. In Unit 7: Lesson 1, students describe transformations and link figures to terms such as *preimages* and *images*. These structured supports ensure students apply symbolic and numeric reasoning to their visual and hands-on experiences.

#### 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	All criteria for guidance met.	2/2
5.4e	All criteria for guidance met.	2/2
_	TOTAL	8/8

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

The materials provide opportunities for students to develop academic mathematical language using visuals. For example, in Unit 1: Lesson 4, the Collaborative Activity requires students to identify and explain the dimensions and area of figures on a coordinate plane, reinforcing vocabulary as they describe their observations.

The materials integrate opportunities for students to use manipulatives and visual models to connect key terms to concepts. For example, using diagrams in Unit 7: Lesson 2, students match everyday movements like slides, flips, and spins to their mathematical terms (*translation*, *reflection*, and *rotation*). They then use tracing paper to perform each transformation and describe their actions with precise mathematical language, while the "Study Expert Videos" model correct usage throughout the lesson.

The materials include structured language supports that help students use precise academic vocabulary during lesson activities. For example, in Unit 1: Lesson 10, the Collaborative Activity uses the sentence stem, "... is greater than... because..." to guide students in articulating their reasoning with correct terminology.

## 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.

The materials include embedded educator guidance to scaffold and support students' use of academic vocabulary in context when communicating with peers and educators. For example, in Unit 1: Lesson 4, the Collaborative Activity on the area of squares uses discussion prompts and exploratory models to help students apply terms such as *square*, *area*, *squared*, and *perfect square*. The "Teacher Prep Video" instructs teachers to help students make connections, such as linking the area of a square to the meaning of "squaring a number," as multiplying a number by itself. The materials include embedded educator guidance to extend students' use of academic vocabulary during peer and written communication. For example, in Unit 1: Lesson 1, students use *terms* such as *percentage*, *ratio*, *equivalent*,

numerator, denominator, and fraction to analyze and compare strategies for rewriting rational numbers in different forms. The "Teacher Prep Video" directs educators to prompt students, "Although there can be more than one strategy that works, have students begin to think about the most efficient strategy." Students use this language to explain and record their strategies collaboratively. The "Course Overview" outlines that each lesson embeds research-based scaffolds to help educators build and extend student understanding of academic vocabulary. These supports include visuals, word banks, scaffolded questioning, discussion prompts, guided notes, and sample student work. For example, in Unit 1: Lesson 2, a Guided Activity on repeating decimals provides opportunities for students to communicate about terms such as rational numbers and terminating decimals with structured teacher prompts to support peer discussion and written explanations.

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

The materials include embedded guidance to support student application of appropriate mathematical language and academic vocabulary in discourse. For example, in Unit 1: Lesson 10, the Collaborative Activity provides sentence stems, such as "... is greater than ... because...," to structure student language use and help learners express precise mathematical ideas clearly during peer discussions. The materials prompt students to use academic vocabulary and written explanations during partner discussions. For example, in Unit 1: Lesson 2, students work together to complete a table of fraction and decimal equivalents. They then discuss the relationships between fractions with common denominators and whether decimals are terminating, using terms such as *terminating decimal*, *repeating decimal*, *numerator*, and *denominator*. The materials guide educators in supporting student discourse with targeted prompts that deepen vocabulary use. For example, in Unit 1: Lesson 2, students are prompted to justify answers with language, encouraging precise mathematical communication: "Based on your work in part A, explain whether it is possible for a repeating decimal to ever terminate?" and "Describe the relationship you observed between fractions with a denominator of 9 and their decimal equivalents."

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

The materials prompt students to hear and practice math language with peers during Collaborative Activities. For example, in Unit 1: Lesson 2, students work in pairs to complete a table of fraction and decimal equivalents, then discuss the relationships between fractions with common denominators, and determine whether certain decimals are terminating. These partner discussions allow students opportunities to listen to and use precise mathematical language in context. The materials provide opportunities for students to refine and extend their math language through peer interaction and discussion. Students revisit their initial ideas, clarify their reasoning, and apply academic vocabulary as they collaborate on problem-solving tasks. For example, the structure of the Unit 1: Lesson 2 activity requires students to verbalize relationships between rational numbers and decimals, using terms like terminating decimal and equivalent fraction while refining their explanations. The materials include

productive math language routines that support structured conversations and language development. For example, MLR1 "Stronger and Clearer Each Time" provides students with a structured process to articulate ideas independently, collaborate with peers to revise and refine their thinking, and present improved written or verbal responses. Similarly, MLR7 "Compare and Contrast" encourages students to analyze and discuss multiple approaches, representations, and mathematical terms, with teacher modeling and student reflection.

## 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.

The materials anticipate a variety of student answers by providing exemplar responses for questions and tasks. Each lesson includes "Answer Key" documents with exemplar student responses typed in red, modeling high-quality answers for teachers. For example, in Unit 1: Lesson 4 on square values, the "Answer Key" shows visual examples of multiple ways students might draw rectangles with an area of 8 square units, as well as an exemplar explanation for whether a square could have an area of 8 square units (noting it is possible using fractional or decimal side lengths between 2 and 3 units). The materials include embedded guidance to support and redirect inaccurate student responses. "Teacher Prep Videos" provide explicit strategies for addressing common misconceptions. For example, when students make errors while identifying relationships in repeating decimals, the materials guide educators to use targeted prompts and step-by-step examples to help students recognize patterns in fractions and decimal representations, ensuring conceptual clarity. The expert videos give educators both anticipated student responses and strategies to address misconceptions. The videos demonstrate how exemplar responses can be used to model accurate reasoning and support classroom discussion. They also offer coaching for redirecting errors, helping educators guide students toward accurate understanding of concepts like repeating decimals and square values through prompts and scaffolded questioning.

#### 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 TEKS process standards are clearly identified and embedded across the materials. The *TEKS Correlation Guide with Breakouts* specifies which process standards the materials address in each lesson and includes direct URL links to their placement within the instructional materials. By doing so, the materials ensure that educators can easily locate where and how each lesson will address the standards. For example, 8.1A is addressed in Unit 5: Lesson 6, when students are given linear relationships and asked to determine the meaning of the slope based on the context. In one problem, students are given a graph of the growth of a bamboo plant. They have to determine the slope, which is 3, and then interpret the meaning, which is that the plant's height increases 3 inches each month. This meets the standard by having students solve problems arising in everyday life.

The materials use multiple representations to write, interpret, describe, represent, and solve problems, providing opportunities for students to make connections between unit rates, constant rate of change, slope, and constant of proportionality using verbal descriptions, tables, graphs, equations, and proportional reasoning.

TEKS process standards are authentically embedded in real-world application tasks that develop critical thinking, problem-solving, and mathematical communication skills. For example, in Unit 4, students apply the Pythagorean Theorem to predict who will win a race and by how much along two paths around a field. Students then work with a partner to mathematically determine the winner. In Unit 5, students analyze linear relationships in tables, graphs, and scenarios to determine the rate of change and interpret its meaning in a real-world context.

### 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 process standards are incorporated throughout the learning pathways. The *TEKS Correlation Guide with Breakouts* identifies where process standards are embedded within lessons. Guided and Collaborative Activities intentionally integrate these standards, making student engagement with process standards a consistent and natural part of learning. For example, in Unit 4: Lesson 4, students use the Pythagorean Theorem to solve problems involving situations arising in

everyday life. They also predict who they think will win a race and show or explain their reasoning as required by Process Standard 8.1D.

The materials describe how process standards are connected throughout the learning pathways. Real-world problem-solving scenarios are embedded across the course to reinforce TEKS process standards. These Guided and Collaborative Activities emphasize these student actions as integral to learning, fostering deeper conceptual connections. For example, in Unit 3, and almost every unit, there is at least one lesson dedicated to solving real-world problems—Unit 3: Lesson 8 "Solving Real-World Problems Involving Numbers Expressed in Scientific Notation." Students are presented with problems involving the size of planets, storage and memory, and processor speeds, the national debt, and populations. Even if the lesson focus is not on solving real-world problems, problems within lessons are given context through real-world scenarios.

The materials support students in developing deep, transferable mathematical understanding by integrating and connecting process standards across multiple content areas. For example, in Unit 5: Lesson 3 "Comparing Proportional Relationships," learners graph and interpret solutions, solve systems using various methods, and connect graphical and algebraic representations. Guiding questions throughout lessons promote reasoning, collaboration, and mathematical communication, strengthening algebraic reasoning and problem-solving skills in context. Students discuss with a partner which robot is traveling the fastest and explain how they know from the graph.

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

The materials provide a clear overview of the TEKS process standards incorporated into each lesson. The *TEKS Correlation Guide with Breakouts* identifies which process standards are integrated and includes URL links directing users to their precise locations within the materials, serving as an effective overview. Additionally, "Unit and Lesson Overviews" highlight the focus and summary where process standards are evident. For example, in Unit 5: Lesson 8 "Proportional vs. Non-Proportional Linear Relationships," students represent and interpret data through proportional and non-proportional relationships in real-world contexts. This intentional inclusion of process standards supports educators in making explicit connections between mathematical concepts and applications, fostering deeper student understanding of problem-solving, reasoning, and communication.

#### 6. Productive Struggle

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

#### 6.1 Student Self-Efficacy

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.1a	All criteria for guidance met.	3/3
6.1b	All criteria for guidance met.	3/3
6.1c	All criteria for guidance met.	3/3
_	TOTAL	9/9

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

The materials help students persevere through solving problems by guiding them to break down complex area calculations into smaller, manageable steps. For example, in Unit 7: Lesson 3, the Guided Activity prompts students to decompose quadrilaterals into triangles and rectangles, redraw each part, label base and height, calculate each area, and sum the results to find the total. The Collaborative Activity extends this process by having students work with partners to decompose parallelograms and quadrilaterals, analyze how the parts relate to the whole, and solve real-world applications, such as determining if a store has enough tile to cover its floor. These tasks encourage students to test multiple strategies, verify units, and justify their solutions while working through multistep problems. The materials help students think mathematically by prompting them to analyze quantities and their opposites in meaningful contexts. For example, in Unit 4: Lesson 7, the Guided Activity and Collaborative Activity ask students to use horizontal and vertical number lines to plot rational numbers from scenarios, such as sea level measurements, temperatures, and financial transactions. Students determine each value's opposite, describe what zero represents in the context, and explain their reasoning. These tasks build conceptual understanding beyond procedural skills by having students interpret values, such as \$27.68 in credit versus its opposite or comparing two pet stores located seven blocks west and east of a bookstore. The materials help students make sense of mathematics by connecting ratios and rates to real-world scenarios and guiding them to reason about their meaning. For example, in Unit 6: Lesson 3, the Guided Activity and Collaborative Activity prompt students to write ratios, draw tape diagrams, and convert rates to unit rates while analyzing contexts, such as recipes, farmland distribution, and nutrition labels. Students interpret rates like "miles per hour" or "acres per farm" and discuss using unit rates to predict outcomes, such as estimating Tyler's running distance in one hour. These activities require students to interpret, explain, and justify their reasoning, deepening their conceptual understanding of ratios and rates.

## 6.1b - Materials support students in understanding, explaining, and justifying 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 by modeling and prompting different strategies. For example, in Unit 1: Lesson 1, students practice division using repeated subtraction, place value, and area models to build a conceptual foundation. In Unit 6: Lesson 3, the Collaborative Activity has students complete tables, analyze patterns, and interpret data with a partner, deepening their mathematical reasoning and understanding as they explore various approaches. The materials support students in explaining that there can be multiple ways to solve problems by prompting discussion, comparison, and reflection on strategies. For example, in Unit 9: Lesson 4, the Collaborative Activity presents students with a textbook solution and an alternative solution. Students solve the problem, compare their solution methods with a partner, and explain the differences between their work and the provided examples. Similarly, in Unit 1: Lesson 2, students use partial quotients in the Guided Activity to discover long division, discussing how different division strategies lead to the same result. The materials support students in justifying that there can be multiple ways to solve problems by requiring them to choose, defend, and model their preferred strategies. For example, in Unit 1: Lesson 2, the Practice Activity asks students to "choose a method of division that makes the most sense to you to find the quotient. Show the work and/or models you used to find your answer: 1,276 ÷ 25." The "Teacher Prep Video" models justification by explaining why the modified partial quotient method is efficient. In Unit 4: Lesson 7, students write about the meaning of zero in real-world contexts, supporting justification of reasoning beyond procedural steps.

## 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 require students to do math with peers and educators by engaging in collaborative, hands-on activities that deepen conceptual understanding. For example, in Unit 4: Lesson 7, the Collaborative Activity has students work together to predict which of three strategies will move a soccer ball to Harlan the fastest. Students test their predictions by calculating actual rates. In Unit 7: Lesson 2, students create transformations by drawing arrows on diagrams, compare the results, and explore how translations affect angles and lines on a coordinate plane. The materials require students to write about math with peers and educators by prompting students to record reasoning and reflect on their strategies. For example, in Unit 4: Lesson 7, students write their predictions about the soccer ball problem before testing their calculations. In Unit 7: Lesson 2, students describe transformations in free-response form after drawing them, using precise mathematical language to explain their observations. The materials require students to discuss math with peers and educators by incorporating partner and group dialogue throughout lessons. For example, in Unit 4: Lesson 1, students discuss what they notice about triangles and the side lengths of a larger red square before entering their responses. In Unit 2: Lesson 4, students

complete a table with a partner, analyze patterns, and discuss their findings, combining verbal reasoning with written analysis to build deeper understanding.

#### 6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	All criteria for guidance met.	8/8
6.2b	All criteria for guidance met.	4/4
_	TOTAL	12/12

## 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 support educators in guiding students to share their problem-solving approaches by encouraging explanations, arguments, and justifications, and providing multiple entry points to engage diverse learners. For example, in Unit 6: Lesson 1 "Solving Equations," the lesson supports educators in guiding students to share their problem-solving approaches by encouraging explanations when students explain their chosen first steps to solve equations such as 12 = 4(1 + q - 2); arguments when students compare and defend different valid solution paths with a partner; justifications when students explain errors from incorrect solution and write tips to correct misunderstandings; and multiple points of entry by allowing students to engage using symbolic equations, verbal reasoning, and substitution to verify solutions, which supports learners with varied strengths and readiness levels.

The materials support educators in guiding students to share their problem-solving approaches by encouraging explanations, arguments, and justifications, and providing multiple entry points to engage diverse learners. For example, in Unit 9: Lesson 1 "Interpreting Linear Relationships from Graphs and Equations," the lesson supports educators in guiding students to share their problem-solving approaches by encouraging explanations when students describe the meaning of slope and y-intercept in real-world contexts; arguments when students debate whether parts of the graph make sense in context such as negative car washes or partial cars and discuss whether the model is still useful; justifications when students defend their interpretations of points, slopes, or what intercepts represent; and multiple points of entry by allowing students to work with symbolic equations, tables, and graphs, as well as verbal or written reasoning, to analyze and communicate their understanding of linear relationships.

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

The materials include prompts to help educators address anticipated misconceptions by supporting student pattern recognition. For example, in Unit 1: Lesson 2 "Repeated Decimals," the "Teacher Prep Video" shows exemplar student responses as students identify patterns in fractions whose decimal equivalents repeat. These examples help educators recognize expected reasoning and redirect inaccurate responses. The materials guide educators in addressing anticipated misconceptions by providing strategies to clarify common errors. For example, in Unit 1: Lesson 2 "Repeated Decimals," the

"Teacher Prep Video" shows how to guide students when they struggle with denominators other than 3, 6, or 9. The presenter models how to redirect and deepen conceptual understanding of repeating decimals by accessing prior knowledge about division.

The materials address support for educators in providing explanatory feedback based on student responses. For example, in the "Teacher Prep Video," the presenter says, "So now they'll discuss with their partner how the values of the previous question could be used to determine the decimal equivalents for one-third and two-thirds... one-third is equivalent to three-ninths... so I know that one-third is equivalent to 0.3 repeating."

This shows the teacher how to guide students to connect prior reasoning (equivalent fractions) to verify decimal values, prompting educators to reinforce correct reasoning and clarify thinking based on student responses.

The material provides guidance for educators to provide explanatory feedback based on student responses. For example, in the "Teacher Prep Videos," as the presenter leads the discussion about making connections between fractions with repeating decimals, the presenter says, "Based on the value of 2/6, we just said that 2/6 is equivalent to 3/9 so 2/6 is 0.3 repeating so one-six should be half of that so how do we write half of 0.3 repeating? So you would love to have some discussion around this. Ask, 'What do you think 1/2 of 0.3 repeating is?'" This models how educators can engage students in reasoning before relying on calculators, prompting deeper understanding and targeted teacher feedback based on how students respond.