

Edmentum, Inc.

Supplemental English Mathematics, 5

Exact Path Mathematics–Grade 5

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Supplemental	9781641032582	Digital	Adaptive

Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	16	1	Flags Not in Report	Not Applicable	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	17 out of 21	81%
2. Progress Monitoring	22 out of 23	96%
3. Supports for All Learners	34 out of 37	92%
4. Depth and Coherence of Key Concepts	14 out of 16	88%
5. Balance of Conceptual and Procedural Understanding	35 out of 38	92%
6. Productive Struggle	16 out of 19	84%

Breakdown by Suitability Noncompliance and Excellence Categories

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

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

IMRA Quality Report

1. Intentional Instructional Design

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

1.1 Course-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.1a	The materials do not include a rationale for learning paths across grade levels (vertical alignment).	4/5
1.1b	All criteria for guidance met.	3/3
1.1c	All criteria for guidance met.	2/2
1.1d	All criteria for guidance met.	2/2
1.1e	All criteria for guidance met.	2/2
—	TOTAL	13/14

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 Access and Teach section of *Exact Path Mathematics* for grade 5 clearly defines the Texas Essential Knowledge and Skills (TEKS) covered by the materials.

The Access and Teach section also includes a link to the English Language Proficiency Standards (ELPS) information. This section clearly illustrates the concepts covered in the materials. Users can navigate the available materials by selecting between options such as Search by Skill, Search by Standard, or Topic Name.

The *Teacher Resource Guide* provides rationale for horizontal alignment within the same grade, but fails to provide rationale for vertical alignment opportunities.

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

An implementation guide is included in the *Teacher Resource Manual*. This guide explains how to access various supports for each lesson, including Guided Practice, Differentiated Support, and Independent Practice. It provides guidance on how teachers can address common errors and misconceptions. It also provides support on how teachers can use the materials in both small-group and whole-group instruction. The materials include a link to "Learn & Support—Exact Path," which includes implementation guidance with recommendations and strategies for effective educator use. For example,

there is a Brief link that opens a document titled "Implement with Fidelity to Accelerate Growth." This document outlines recommendations for both universal and targeted interventions. These materials include Lesson Ideas with various resources for implementation, including Components, Lesson Objectives, Learning Modalities, Warm-Ups, Procedures, Independent Practice, Closing Activities, Advanced Learner Options, Struggling Learner Options, Extension Activities, and English Language Learner (ELL) teaching tips. The materials include a *Teacher Resource Manual* that provides an explanation of the Lesson Ideas format, along with general guidance for teachers to review each lesson in detail.

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

The materials provide students with a Learning Path that links the skill to the standard covered, referencing the TEKS organized for each student with designations of the Previous, Current, and Next skills to be covered.

The materials include a K–12 Learning Progression Report that lists the skill, along with its corresponding domain and skill statement. The materials include a "Student Learning Path Placement," though this resource provides minimal guidance.

The Assessment Solutions under Diagnostic Results and Reports is an overview that includes summaries of Class Results, as well as individual Student Summary Reports. These reports provide details on various metrics, including the Adaptive Diagnostic Experience, Diagnostic Scale Score, Domain Details, Grade Level Proficiency (GLP), Student Growth, Typical Growth, Learning Path Placements, Lexile and Quantile Score, and National Percentile Rank (NPR).

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

The *Exact Path Mathematics* grade 5 materials facilitate internalization of lessons. These include implementation guides that detail the materials needed, along with step-by-step instructions on how to teach the lesson and ELL teaching tips. It also sorts the TEKS into their respective domains based on Texas Education Agency classification. Teachers can access a student's Knowledge Map to track their progress through the units and domains.

The materials include a "Guidance for Educators" document that references the New Teacher Homepage, which can also be accessed from the Help Center button. This resource explains how educators can view students' performance on their individual learning paths and how teachers may respond to students in each of the three categories: Needs Attention, May Need Support, and Deserves Recognition.

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

The materials include an "Understanding the Administrator Dashboard" resource, which provides administrators with guidance on overseeing the *Exact Path Mathematics* implementation and monitoring process.

The materials include a Lesson Idea document for each grade 5 standard, providing guidance on lessons. The materials provide guidance for school leaders to support teachers in implementing the curriculum.

1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	This guidance is not applicable to the program.	N/A
1.2b	The materials do not include lesson components with suggested time frames.	4/5
1.2c	The materials do not contain support for families in Spanish and English for each unit, with suggestions on supporting the progress of their students.	0/2
—	TOTAL	4/7

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.

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

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.

The materials provide TEKS- and ELPS-aligned assessments that adapt to student progress. The materials include Lesson Idea documents for each skill or standard. The students are assigned lessons based on their performance on the Diagnostic Assessment.

The location for the resources is found in Texas Resources, Help, Exact Path Guide, which contains all the ELPS and TEKS aligned to each skill. The timestamps provided do not provide guidance to teachers on the length of each component.

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

The materials provide support for families in both English and Spanish, including videos (e.g., "Getting Started" and "Exact Path for Families"), family letters, and embedded support to facilitate translations from English to Spanish (additional languages are also available). However, these supports are not unit, pathway, or cluster specific, and do not vary based on the student's progression.

The text-to-speech function provides only English audio. Navigation tools for students include an "HOLA" icon that, when clicked, enables access to embedded language supports.

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	All criteria for guidance met.	4/4
2.1d	All criteria for guidance met.	4/4
2.1e	All criteria for guidance met.	4/4
—	TOTAL	16/16

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

The materials include definitions and describe the intended purpose of the diagnostic assessment. This section explains that the diagnostic assessments "are grade-agnostic tests, designed to measure a person's knowledge without regard to their grade level." The materials further explain computerized adaptive tests that are student-centric, "which means that students receive targeted questions that adjust in real time based on their responses and individual ability level."

The materials explain the diagnostic assessments and how to utilize them. For example, teachers can view students' results in the Student Summary Report, which provides specific information about each student's performance on individual skills.

The materials include a video, "Welcome to Your Diagnostic," for students and their families. The video explains what a diagnostic test is, how it works, and what students can expect to see and do during the assessment.

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

The *Exact Path Mathematics* grade 5 materials include guidance on administering the diagnostic assessments, including tips on the testing environment and what to say to prepare students for the upcoming diagnostic. Students can be assigned a video to watch before taking the diagnostic, which tells them why they are taking the test, how the questions are administered, and how to navigate through the diagnostic.

The materials provide Test Administration Guidelines, which include procedures and recommendations for before, during, and after testing. This resource outlines the Test Administration Protocol, which

includes steps for administering the assessment, such as preparing students and the testing environment, suggested verbal prompts, and provides approximate testing times. The guidelines allocate five minutes for directions and 30–45 minutes for assessment for grades 3–5.

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.

Exact Path Mathematics grade 5 includes ways for teachers to administer assessments with accommodations, including three audio features: automatic read-aloud, prerecorded on-demand audio, and text-to-speech. Guidance is provided regarding the use of text-to-speech accommodations, which are recommended only for students with IEPs and 504 plans. Also included are visual accommodations in three categories: blindness, color blindness, and low visual acuity, which can be enhanced through the use of grayscale and screen magnifiers. Blindness gives guidance on scribe usage. Calculator use is covered in the case of IEP or 504 plan accommodations that are required, and is addressed as a prompt for appropriate questions.

The materials include support for ELLs, including teacher guidance to provide a dictionary. The product also includes built-in text-to-speech capabilities, closed captions for videos, and highlighted vocabulary words, along with integrated tools for translation, definition, and audio support. These supports are included to prevent teachers from overinterpreting the text.

The materials provide guidance for educators to print and administer assessments tailored to individual students' accommodations. The platform features text-to-speech, calculators, and content and language support tailored to students' individual needs.

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

The grade 5 *Exact Path Mathematics* diagnostic includes varying levels of complexity across multiple skills. For example, there are questions on fractions that increase or decrease in complexity depending on how accurately the student answered previous questions. The materials include diagnostic tests with four different interactive question types, including multiple-choice questions, multi-select, inserting text, and dragging a shaded section on a number line to show fraction parts.

Diagnostic assessments include TEKS-aligned questions from grades 2 through 5, with varying levels of complexity. For example, a grade 5 diagnostic assessment includes questions that relate to identifying factors and pairs of multiples, evaluating multistep numerical expressions, writing expressions, symbolizing, and solving equations.

The materials explain that *Exact Path Mathematics* is a holistic literacy and math intervention program based on a skills framework that is strongly aligned with the TEKS. As such, it incorporates three Adaptive

Diagnostic Assessments that define strengths and needs, enabling reflection on growth. The materials combine instructions, lessons, and practice into individualized learning paths to address individual skill gaps and ensure progress.

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

The grade 5 *Exact Path Mathematics* provides several formative assessments with varying levels of complexity. For example, in the Order of Operations assignment, the student must solve basic order of operations problems with multiple-choice answers, followed by problems without provided answers. They also have to add parentheses to make the expressions true. The materials include multiple formative assessments with interactive item types, including multiple-choice, drop-down, drag-and-drop, graphing, and text-entry questions.

The materials include a variety of TEKS-aligned formative assessments, such as Learning Path practice and progress checks. For example, the grade 5 Priority Skills Lesson "Add and Subtract Fractions: Unlike Fractions" includes eight practice exercises and a mastery quiz.

The materials include a Progress Check that features one question with three blanks, allowing for a multiple-select answer choice or a multiple-choice option, as well as drawing tools for creating a number line. The materials include multi-step problems with more than two levels of complexity. The student must be able to understand the letter representation of expressions and equations. The questions provide more than one possible answer, and students must apply mathematical knowledge to analyze and answer them.

2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	The materials do not provide a rationale for incorrect answers.	2/3
2.2b	All criteria for guidance met.	1/1
2.2c	All criteria for guidance met.	2/2
2.2d	This guidance is not applicable to the program.	N/A
2.2e	All criteria for guidance met.	1/1
—	TOTAL	6/7

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

Exact Path Mathematics grade 5 includes Standards Mastery Assessments, which are assessments that teachers can assign according to the TEKS. On the printable version, teachers have access to the correct answers and explanations.

The materials include scoring information and guidance for interpreting student performance through the Diagnostic Experience graph. This graph represents the student's experience on the diagnostic and shows which items were answered correctly or incorrectly. However, it does not include a rationale for incorrect responses.

The materials break down students' performance by standards. This allows teachers to view and identify which standards are being mastered and areas that require improvement. Students' mastery levels are identified as Developing, Approaching, Mastery, or Strong Mastery.

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

In the "Teacher Resource Drawer," materials include instructor access to Lesson Ideas, which feature adaptations for acceleration and remediation, as well as teacher support, such as anticipated misconceptions and feedback prompts. These Lesson Ideas are directly tied to the skills students are working with on their Learning Path.

The materials include lesson ideas that provide step-by-step implementation guidance, such as scripting, differentiation ideas based on student needs, guided lesson plans, answer keys, student practice exercises, and extension activities.

The materials provide guidance for the use of the included tasks and activities. For example, each Lesson Idea includes implementation supports such as scripting, ideas for differentiation based on student needs, guided lesson plans, and extension activities.

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

The materials include a Knowledge Map for teachers to assess students' progress on their Learning Path, which shows educators which skills a student has mastered, is currently practicing, or is struggling with.

The materials include tools for students to track their own progress and growth. For example, the Student Goal Tracker Gameboard enables students to track their personal goals and rewards.

The materials include tools for teachers to track student progress and growth. For example, teachers can access information on students' progress through their learning reports by using the Skills Performance Report, Learning Path Progress Report, and Learning Path Availability Report.

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.

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

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

The materials for the student include immediate feedback after answering a question, indicating whether the answer was correct or incorrect, and providing them with another opportunity to answer it correctly.

The materials include adaptive assessments embedded within each lesson, providing real-time data on student understanding. For example, the Learning Path consists of Lessons, Practices, and Progress Checks. A score of 80 percent or above on a Progress Check indicates mastery, while a score below 80 percent indicates a need for additional assistance. The student can work through the module again and attempt the Progress Check a second time. If a student scores below 80 percent on the Progress Check a second time, they will be given a building-block lesson that focuses on a prerequisite skill. If they master that building-block lesson, they will revisit the original skill with an alternate lesson.

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	All criteria for guidance met.	3/3
3.1e	All criteria for guidance met.	2/2
—	TOTAL	12/12

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.

The materials provide lessons and practice problems for students based on their current level of understanding, while automatically adjusting skill level based on the student's performance on the diagnostic assessment. If a student struggles with a particular concept, the program provides additional lessons and practice targeting that skill before moving on to more advanced content.

The materials include explicit educator guidance for lessons to scaffold for students who have not yet reached proficiency in prerequisite or grade-level concepts and skills. For example, in the grade 5 Lesson Idea for "Classifying Two-Dimensional Figures," the Struggling Learner option provides procedural steps for teachers to support students who struggle with identifying polygons. The procedure provides one-on-one guidance using printed flashcards and a T-chart. The student identifies 2-D polygons into known and unknown columns. If the student does not name the polygon successfully, an explanation of what the polygon is will be provided, along with hints or tips to help them remember its name. The guidance states, "Repeat the process with other students who are struggling with the lesson."

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

The grade 5 *Exact Path Mathematics* includes online lessons that introduce vocabulary through direct teaching. As a new vocabulary word is introduced, the lesson will bold the word, provide a mathematically correct definition, and offer an example and/or visual representation of the word. In the grade 5 lesson "H (2, 0)," the word *x-axis* is introduced with a definition, a picture, and an example. All online lessons include a link to a dictionary in the top left-hand corner.

The materials include explicit guidance for embedded support for developing academic vocabulary and unfamiliar references in the text. For example, in the Lesson Idea for the "Volume Resource" lesson, teachers are provided with key lesson vocabulary, directed to form small groups with structured roles, and instructed to use a graphic organizer to reinforce key concepts.

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

The materials include Priority Skills Lessons with a component titled Advanced Learner Option and Extension Activities that provides the teacher with ideas for enrichment activities, such as creating models, games, story problems, and riddles related to the lesson content.

In grade 5, the Lesson Idea materials include a designated Advanced Learner section that provides enrichment opportunities for students who have demonstrated proficiency in grade-level content. Students access an Advanced Learner activity sheet in the "Add and Subtract" Lesson Idea resources and have the opportunity for independent practice.

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 instructions on how educators can enable audio controls for students who require click-to-speak accommodations. Enabling audio controls allows them to select any text and have it read aloud to them. This accommodation can be toggled on and off for all students or a select group.

The materials include instructions for how educators can enable calculators for students in each grade level. Teachers have the option to hide calculators from skills where calculators are available.

The material includes accommodations that educators can enable or disable to support individual students. For example, text-to-speech reads all available text to the student. This feature must be enabled on a per-student basis. When text-to-speech is enabled for a student, they may toggle on Click-to-Speak in the Reader Tools toolbar. This will allow the student to select any text and have it read to them. The sentence being read will be highlighted in yellow, and the current word being read will be blue.

The platform includes the ability to toggle on and off the following features: text-to-speech, calculators, and content and language support for individual student accounts.

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

The materials include Lesson Ideas that provide teachers with various ways for students to demonstrate their knowledge of a skill. In the grade 5 Lesson Idea "2-Dimensional Figures," the students draw and identify polygons, name polygons around the room, and create polygon riddles.

In grade 5, the Lesson Idea resource includes teacher guidance on options and supports for students to demonstrate understanding in multiple ways. For example, in the "Numerical Expressions" lesson, the teacher guides students through the development of an anchor chart, then students complete a guided practice activity. There is also an opportunity for students to create a construction paper pennant on which they solve an expression.

3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	All criteria for guidance met.	5/5
3.2b	This guidance is not applicable to the program.	N/A
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	12/12

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.

In the grade 5 Lesson Idea "Interpret Multiplication as Scaling," the materials provide explicit guidance to educators to help connect patterns within area models of fractions. The teachers are instructed to ask, "Using this model, will the product be greater than, less than, or equal to the factor 2?" This helps students make the connection between whole numbers and fractions.

In grade 5, the Lesson Idea resource includes teacher guidance to build knowledge by activating prior knowledge, anchoring big ideas, and highlighting key patterns. For example, in the "Numerical Expressions" lesson, the teacher guides students through solving an equation by exposing them to two different answers. In the main lesson, the teacher directly explains to the students that each of the problems from the Warm-Up gave various answers, activating prior learning. Using that learning, the teacher explains the "order of operations" rules.

Another example can be seen in the Warm-Up for the "Representing and Interpreting Data" lesson. Here, the teacher guides students through measuring the length of their feet to the nearest half-inch and recording the measurement. In the main lesson, the teacher instructs students to create a line plot using the measurements they made in the warm-up activity.

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

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

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

Adaptive materials adjust the level of difficulty of the student's Learning Path based on the student's responses to the lessons. Immediate feedback is provided, and students are directed to prerequisite skills when necessary. Immediately, educators can access students' progress and identify which lessons they are struggling with. The program provides lesson ideas along with intervention strategies, including whole-group, small-group, and individual activities that require teacher guidance.

The materials include a *Teacher Resource Manual* that outlines lesson ideas and their implementation, explains the components of the lessons, describes various teaching practices, and provides examples for integrating lesson ideas in whole-group, small-group, and collaborative learning settings.

The grade 5 *Exact Path Mathematics* lesson materials allow for various types of practice, including guided practice, independent practice, and differentiated learner support. For example, in the "Understand the Coordinate System" lesson, the materials include a warm-up, guided practice (including paired work), and independent practice. The materials also include teacher guidance for activities that cater to struggling and advanced learners.

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 the statement, "*Exact Path* provides personalized learning experiences for advanced students while maintaining age-appropriate content (up to two grades above their current level)." Teacher customization options include modifying or augmenting learning paths for students requiring targeted acceleration. Each lesson plan includes differentiation procedures for advanced learners and extension activities for further enrichment.

In grade 5, the "Powers of Ten" lesson materials include an Advanced Learner activity that extends students' learning by having them complete riddles that create decimal numbers and share them with their group. In the enrichment materials, the lesson guides students to roll a number cube to create decimal numbers.

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

The Knowledge Map provides educators with real-time feedback on a student's progress along their Learning Path. Educators can see which lessons a student has failed, is currently struggling with, and has mastered. Educators can then provide prompt guidance through the Lesson Ideas.

The materials include the Teacher Homepage guidance document, which provides tips on how teachers can identify and respond to students in each of the following categories: Needs Attention, May Need

Support, and Deserves Recognition. The tips include ideas for what teachers might see, prompts for what to think about, and suggestions for how teachers can take action to support students in each category.

The materials include the "Numerical Expressions" lesson, which enables teachers to assess students and provide formative feedback using the whiteboard activity. Teachers are guided to review student responses in the moment, ask students to explain their thinking, and reteach if necessary.

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	This guidance is not applicable to the program.	N/A
3.3b	The material does not include increasingly more academic language for one, two, or more additional levels.	1/4
3.3c	All criteria for guidance met.	1/1
3.3d	All criteria for guidance met.	8/8
3.3e	This guidance is not applicable to the program.	N/A
—	TOTAL	10/13

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.

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

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.

The materials contain educator guidance on providing and incorporating linguistic accommodations to support educators in assisting ELLs by providing ELL Teaching Tips. For example, in the grade 5 "Water World" Lesson Idea, educators can pre-teach the academic vocabulary words necessary for the lesson. The materials also suggest having students respond to mathematical questions in their home language first and then translate to English, if needed.

The materials do not include embedded linguistic accommodations for all levels of language proficiency, designed to engage students in using increasingly more academic language.

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

Exact Path Mathematics for grade 5 provides support for educators to assist ELLs with materials, including explicit vocabulary instruction on key terms, an English dictionary, and background knowledge that students need to successfully complete the content.

The materials include implementation guidance to support educators in effectively using them, along with a description of allowable testing conditions and special accommodations. These materials feature built-in text-to-speech functionality, closed captions for videos, and highlighted vocabulary words with tools for translation, definition, and audio support.

The materials include implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL programs. For example, the Lesson Idea for "Numerical Expressions" includes ELL Teaching Tips to assist with key lesson vocabulary, such as academic language, guided independent work, and the use of Red/Yellow/Green reflection.

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 grade 5 *Exact Path Mathematics* includes embedded guidance for teachers within the Lesson Ideas that help students develop academic vocabulary, increase comprehension, build background knowledge, and make cross-linguistic connections through oral and written discourse. For example, in the grade 5 Lesson Idea for "Solve Word Problems Involving Fractions," the teacher uses models and correct academic vocabulary to connect students' knowledge of fractions to the lesson. The instructor provides sentence frames such as "An equivalent fraction for __ is __," and "The numerator is ___" to help students develop academic vocabulary when speaking and writing.

The materials include guidance for allowing students to demonstrate understanding of a content task by responding in their home language or by doing preparatory work in their home language before responding in English. For example, the Lesson Idea for the "Multiply Whole Numbers" lesson asks students to write the problems for the first Extension Activity in their native language and then challenges them to translate them into English. Students utilize the integrated bilingual dictionary to enhance comprehension, establish cross-linguistic connections, and expand their academic vocabulary through written discourse.

The materials include designated lesson guidance and ELL Teacher Tips that provide 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. For example, in the Lesson Idea for the "Powers of Ten" lesson, students build background knowledge of place value in both the warm-up activity and the main lesson. They build comprehension through the

Getting Bigger/Getting Smaller guided practice activity and have the opportunity for cross-linguistic connections through group/partner work and written reflection in the ELL Teacher Tips activity, Red/Yellow/Green Reflection.

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.

In the grade 5 lesson, "Photo Finish," students are introduced to comparing decimal numbers. The lesson provides practice problems on selecting the correct symbol to compare two decimal numbers ($<$, $>$, or $=$). As the lesson progresses, the student must then select the correct number to make the equation true.

The materials provide practice opportunities that require students to demonstrate a depth of understanding aligned to the TEKS. For example, in the grade 5 practice assignment, "Problem Solvers," students are asked to evaluate expressions by filling in the blanks with numerals and selecting from answer choices. Students then take the Problem Solvers Quiz, where they evaluate expressions and type in the correct answers.

The materials include learning paths that feature learning, practice, and mastery checks, which are aligned with the TEKS outlined in the learning pathway overview, as well as final checks at the end of each path to assess mastery. The measure is completely covered through practice opportunities and instructional assessments throughout the Learning Path. The materials in this pathway include two lessons: "Bake Sake" and "Baking Patterns." The materials include practice with questions and a mastery quiz at the end of the Learning Path.

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 include assignments in the program that increase in rigor and complexity as the lessons go on. As students complete lessons and pass the Progress Checks, they progress to increasingly more complex skills. The program does not assign lessons based solely on grade level, but rather allows students to progress through the lessons at their own pace and ability levels. For example, in the grade 5 lesson "Photo Finish," students learn about comparing decimals. As the lesson progresses, the question

types increase in rigor, moving from basic numbers to larger numbers, while also asking the students to apply knowledge from a previous lesson on decimal place value. In a grade 5 enrichment activity, students apply their knowledge of multiplying whole numbers to a real-world problem by solving and comparing several multiplication scenarios. Students then create their own multiplication word problems.

The materials include opportunities for students to engage in questions and tasks that increase in rigor and complexity. The Learning Path introduces each student to a set of skills identified for them to work on, stating, "These skills are not restricted to a given grade level; instead, the skills represent critical learning components from the entire K–12 learning progression that match a student's academic readiness." The materials explain that if a student needs a challenge, then teachers can "place a student completely above a domain, by selecting the last grade level available in the domain and place out of the domain as the new skill. Saving changes will create a brand new Learning Path, and assign your student new content based on placement and skill progression order."

The materials include a guided practice worksheet, which uses examples and models to teach the topic, then progresses to word problems that students must solve, with odd shapes serving as the final practice that demonstrates increasing rigor and complexity in the task. For example, the Advanced Learner and Extension Activities have students create their own drawings, label all dimensions, and calculate the volume. The Extension Activity also requires them to find three objects at home (rectangular prisms) with allowance to estimate to the nearest whole. This demonstrates both on-level and above-grade-level tasks, including both the task and extension activities.

4.2 Coherence of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.2a	All criteria for guidance met.	1/1
4.2b	All criteria for guidance met.	1/1
4.2c	The materials do not connect students' prior knowledge of concepts and procedures to the mathematical concepts to be learned in future grade levels.	2/4
—	TOTAL	4/6

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

The materials include instruction on how to convert units between both customary and metric units, and make a connection to how they are both solved using the same method, either multiplication or division.

In the grade 5 lesson, "Problem Solvers," students are taught that "operations are always performed in order: first multiplication and division from left to right, and then addition and subtraction from left to right," and then consider grouping symbols. It then explains that "if you do not do the operations in the right order, you will not get the right answer."

4.2b – Materials demonstrate coherence vertically across concepts and grade bands, including connections from grade K–6, by connecting patterns, big ideas, and relationships.

The grade 5 *Exact Path Mathematics* materials include a lesson that demonstrates how to round decimals. The lesson begins by stating, "You can round decimals to a place value in the same way you round whole numbers to a place value." This helps students make the connection that rounding decimals is similar to rounding whole numbers, which they learned in previous years.

The materials include the statement, "skills are not restricted to a given grade level; instead, the skills represent critical learning components from the entire K–12 learning progression that match a student's academic readiness."

In grade 5, students learn fractions and ratios. The rigor increases by introducing finding areas by multiplying fractions, scaling, dividing fractions and whole numbers, and ending with solving word problems involving fractions.

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

The materials include the lesson "Wags to Riches," which reviews area models as a method for solving multiplication problems. The lesson then proceeds to demonstrate to students that, since division is the inverse operation of multiplication, they can also use area models to solve division problems.

Lessons and activities in the program do not make connections to concepts or procedures to be learned in future grade levels. The materials do not include prompts or guidance as to how to connect the lessons to concepts to be learned in the future.

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 review previously learned skills or concepts across the learning path and mainly focus on the current learning. The Knowledge Map displays students' progress in developing these skills.

The materials include guidance for teachers in the *Teacher Resource Manual* under the header Accommodation Support and Learning Extension, which provides suggested adaptations for struggling learners. The adaptations include support for struggling learners through teacher-guided practice and reassignment to previous skills lessons for reinforcement.

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

The materials include guidance for teachers in the *Teacher Resource Manual* under the header Accommodation Support and Learning Extension, which provides suggested adaptations for struggling learners.

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 models and representations for mathematical concepts and situations.

The materials provide the Lesson Idea for "Find Area by Multiplying Fractions," where the teacher and students both use models to find the area of a rectangle. After the teacher models a problem with the answer $12/48$ sq. cm., they ask, "How can we find the side lengths?" This requires students to analyze the model and work backwards to find the side lengths.

The materials include a worksheet titled Street Shapes—Hierarchy of Quadrilaterals, which allows students the opportunity to review shapes, analyze to generate different names for each shape, and then evaluate using the terms *always*, *sometimes*, or *never* to answer questions about the shapes.

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

The materials include pictorial models and concrete representations in the Lesson Idea for "Solving Real-World Problems Involving Volumes." Here, students are prompted to design a storage container that could hold exactly 36 cubic inches, draw the container, label all dimensions, and show their volume calculations. Students are encouraged to find different possible dimensions that would result in the same volume.

Grade 5 materials outline tasks that provide students with the opportunity to create concrete models and pictorial representations. In the "Coordinates" Lesson Idea, students are directed to create a map of their neighborhood, labeling features such as their home, stores, playground, park, school, bus stop, and other relevant locations. They then identify the ordered pairs for each location.

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

In the grade 5 Lesson Idea for the "Find Area by Multiplying Fractions" lesson, students use their knowledge of finding the area of a rectangle with fractions and work backward to find the unknown side lengths given a known area, requiring them to apply their knowledge to an unfamiliar situation.

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.

In the grade 5 lesson, "Number Patterns," students each receive an index card with the word *increasing* or *decreasing* written on it. The teacher shows the class a pattern and has each student hold up their card while the teacher scans the room, which supports fluency by helping students quickly recognize number patterns.

In the grade 5 practice lesson, "Photo Finish," the students practice comparing decimals. They are given 12 questions in which they are asked to compare two decimal numbers.

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

In the grade 5 lesson, "Wags to Riches," students are introduced to various methods for dividing numbers. First, they are shown that division is the inverse of multiplication and that they can use an area model to solve division problems, just as they did with multiplication. The lesson demonstrates how large numbers can be broken down into smaller numbers for greater efficiency. The materials include various division methods, and the students can choose one or more strategies that work for them, making them more efficient and accurate.

The materials provide a Lesson Idea for the "Add and Subtract Fractions" lesson in which students begin with a warm-up, solving addition and subtraction fraction problems with the same denominators. They then add and subtract fractions with unlike denominators by finding equivalent fractions with the same denominators. Students practice using models to find equivalent fractions, which provides practice in applying learned concepts with flexible, accurate, and efficient problem-solving strategies.

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

In the grade 5 lesson "Line Plots," students learn how to create line and stem-and-leaf plots using their shoe measurements. Students make both data representations. The teacher asks the students, "Which

data display would be best for finding the smallest and largest values?" The instructor guides students to reflect on and evaluate the best representation for the task.

The materials include the lesson "Subtracting Mixed Numbers: Unlike Denominators Tutorial," in which students are given multiple opportunities to evaluate the representations, strategies, and solutions for subtracting mixed numbers. For example, students are presented with five steps for solving and asked to consider the solution at each step.

The grade 5 lesson materials include the "Coordinate System" Lesson Idea activity. The teacher models for students how to use the coordinate system, and then students have the opportunity to evaluate the strategies taught by drawing objects using ordered pairs.

5.2d – Materials contain guidance to support students in selecting increasingly efficient approaches to solve mathematics problems.

In the grade 5 lesson "Ready Set Subtract," students are shown how to subtract decimals using pictorial models. As the lesson progresses, students are shown how to subtract decimals using a place value chart, and then they are introduced to the standard algorithm. This helps students visualize the problem and see how the standard algorithm is the more efficient method.

The materials include the "Multiply Fractions" Lesson Idea activity. In this activity, students solve an equation by drawing an array to represent it. The teacher then directs students to use a more efficient strategy of multiplying fractions, with guidance on numerators and denominators.

5.3 Balance of Conceptual Understanding and Procedural Fluency

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

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

In the grade 5 Lesson Idea for the "Multiply Fractions" lesson, the overview provides a Teacher Tip which states, "This lesson uses arrays to guide students in multiplying a whole number by a fraction. The visuals are meant to help solidify students' conceptual knowledge so that, in the future, they can compute the products without the aid of models." This idea explicitly states how the lesson will focus on the TEKS conceptual and procedural emphasis.

In the grade 5 lesson "Interpret Multiplication as Scaling," the overview provides a Teacher Tip which states, "This skill builds students' conceptual knowledge about how a fractional factor affects the product." The lesson concludes with a worksheet that practices the concept, helping to build on the procedural aspect of the TEKS.

The materials explicitly state how the conceptual and procedural emphasis of the TEKS is addressed. For example, the grade 5 Lesson Idea, "Division with Fractions," explains how students will explore dividing unit fractions and whole numbers conceptually by using models and grid paper before transitioning to solving equations that divide whole numbers by fractions, building on the procedural aspect of the TEKS.

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

Materials include the "Solve Real-World Problems Involving Volume" Lesson Idea, in which the learning objective states that students will solve real-world problems involving the calculation of volumes of rectangular prisms. In the Observe and Respond guidance, students draw a pictorial representation of a prism and label the length, width, and height. Then, students shade in the prism's base, and the students are guided to use $V = l \times w \times h$ or $V = B \times h$ for the abstract model practice. The Struggling Learner guidance directs students to construct a concrete model using unit cubes to build simple rectangular prisms.

The materials include the "Coordinate System" Lesson Idea, in which the learning objective states that students will be able to identify and locate points on a coordinate grid. In the Struggling Learner resource, students use a concrete model through the masking tape coordinate grid activity. In the

Extension Activity, students create a pictorial representation by mapping their neighborhood and labeling key locations, such as the school, grocery store, and home.

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

The materials include the "Coordinate System" Lesson Idea, where the instructor uses masking tape to create a coordinate grid system on the floor for a concrete representation. Then, the students use their bodies to move around the coordinate grid, following the teacher's instructions. The students write ordered pairs on index cards and move to that location. For the representational model, students create a map of their neighborhood using a coordinate grid system. It prepares them to work abstractly to plot points on a coordinate grid using pencil and paper.

The materials include support for students in connecting, creating, defining, and explaining concrete and representational models to abstract concepts, as required by the TEKS. For example, in the "2-Dimensional Figures" Lesson Idea, the main lesson guides students in creating a graphic organizer that outlines special 2-dimensional shapes and prompts them to define their characteristics. Additional Learner Supports direct the students to identify polygons in real-world examples in the classroom and at home, and explain their characteristics and terms that define each polygon.

The materials include support for students in connecting, creating, defining, and explaining concrete and representational models to abstract concepts, as required by the TEKS. For example, in the "Solve Real-World Problems Involving Volume" Lesson Idea, Advanced Learner students create their own composite shapes using two or more rectangular prisms and define all dimensions. Struggling Learner guides students using unit cubes to build simple rectangular prisms, making the abstract concepts outlined in the TEKS concrete.

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.

In the grade 5 lesson "Brilliant Beetles," students are visually shown how to create a line plot. As they move into further lessons, students will need to be able to identify line plots among other types of graphs. The visual provided helps connect the academic vocabulary to the concept.

In the grade 5 Lesson Idea for "Solving Real-World Problems Involving Volume," opportunities are provided for students to use academic mathematical language by using pictures, models, manipulatives, and real-life objects to solve problems and calculate volume. Then, students are prompted to discuss as a class why some objects with similar appearances might have very different volumes.

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, support, and extend students' use of academic mathematical vocabulary in context when communicating with peers and educators. For example, in the "Compare Decimals" Lesson Idea, the teacher guidance directs students to work in pairs to play a game with the Guided Practice cards. The Struggling Learner activities allow students to communicate with their teacher as they work through and scaffold the concept of comparing decimals.

In the grade 5 Lesson Idea for "2-Dimensional Figures," students and the educator complete a graphic organizer that includes polygon names, examples, and definitions. Using the graphic organizer, students discuss with a partner how they can name shapes using the vocabulary terms from their graphic organizer.

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

In the grade 5 "Line Plots" Lesson Idea, educators provide sentence stems, such as "My foot measures . . . inches" and "The shortest measurement is . . . inches." These sentence stems allow students to use mathematical language properly in discourse.

The materials include the "Adding and Subtracting Decimals" Lesson Idea, which provides guidance on eliciting discourse from students. In the guidance for the Decimal Decathlon section, the teacher is directed to point to the decimal number sum shown, ask students whether the problem has been set up correctly, and ask students to explain their answers.

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

In the grade 5 Lesson Idea for "Interpret a Fraction as Division," the materials suggest "Pair students with another student and encourage students to talk through their thinking together. Give each pair base-10 pieces and a place value chart to recreate what they describe." This activity encourages students to listen to and refine their mathematical language with their peers.

In the Lesson Idea for "Find Area by Multiplying Fractions," the educator is encouraged to pair a struggling learner with an advanced learner, having the advanced learner explain the steps to the struggling learner. They then work together to complete the activity, guiding each other as needed. This activity encourages the use and refinement of mathematical language with peers.

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

The materials provide answer keys to all worksheets. On the grade 5 answer key to the worksheet "Tanks A Lot," possible student answers are shown to help educators model correct reasoning and facilitate practical discussions.

The materials include a Feedback Response Accommodation. The description of this feature states, "Students receive feedback with each item. Most feedback is growth-mindset and whole learner-focused. Additional support is provided if a student gets the item incorrect to help students correct any misconceptions."

In the grade 5 Lesson Idea for "Line Plots," the materials include an Observe and Response activity using "If a student . . ." and "then" statements, which guides the anticipation of misconceptions and addressing inaccuracies. For example, if a student measures their foot with the wrong unit or to the wrong nearest increment, then review the inch and centimeter units on the ruler.

5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	The materials do not include a description of how process standards are incorporated or connected throughout the learning pathways.	0/2
5.5c	The materials do not include TEKS process standards for each lesson.	0/1
—	TOTAL	1/4

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

TEKS process standards are integrated into the materials. Students are regularly encouraged to reason through questions, explain their thinking, and test their understanding in various contexts.

In the grade 5 lesson "Party Planner," students apply a problem-solving model (process) to solve problems involving decimals (content). They must determine which operation to use, identify the necessary information to solve the problem, and formulate a plan.

The materials include an "Exact Path: High Quality TEKS-Aligned Assessments" document, which features a table displaying the TEKS Mathematics Coverage within *Exact Path Mathematics* for each grade level. The following TEKS alignment data are shown: grade 3, 98 percent; grade 4, 98 percent; and grade 5, 97 percent.

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

The materials do not include a description of how process standards are incorporated and connected throughout the learning pathways.

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

The materials include an *Exact Path Correlation to Texas Essential Knowledge and Skills (TEKS) Guide*, which provides a TEKS standards reference, including the activity type, audience, citation, URL, page(s), and location; however, the materials do not include an overview of the TEKS process standards in each lesson.

The materials include the TEKS process standards incorporated within the learning pathways; however, lesson materials do not clearly outline how the standards are incorporated into each lesson. The examples in the evidence guides could not be identified in specific lesson materials. The *TEKS Guide* provides an overview of lesson components that include process standards; however, individual lessons do not specifically identify where these process standards are addressed.

The materials do not include an overview of the TEKS process standards incorporated into each lesson. For example, in grade 5, the standard is only listed in the introduction of the "Domain: Fractions and Ratios" lesson.

6. Productive Struggle

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

6.1 Student Self-Efficacy

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.1a	All criteria for guidance met.	3/3
6.1b	The materials do not support students in justifying that there can be multiple ways to solve problems and complete tasks.	2/3
6.1c	All criteria for guidance met.	3/3
—	TOTAL	8/9

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

The materials include a Lesson Idea for "Solving Real-World Problems Involving Volume," where students are provided with unit cubes to build simple rectangular prisms. Students count the total number of cubes to find the volume and then verify their answer using the formula for volume.

The materials provide opportunities for students to think mathematically, persevere through solving problems, and make sense of mathematics. For example, in the video lesson and student practice activity "Fractional Escape," the materials break down the concept of solving word problems involving fractions into visual and verbal explanations, followed by interactive questions that prompt students to apply their own understanding.

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

In the grade 5 Lesson Idea for "Multiply Whole Numbers," the students are presented with a problem and asked to solve it independently. Then, they are asked to share their work with a partner and to explain their problem-solving process. This process supports students in understanding that there are multiple ways to solve a problem and helps them learn to explain their work.

The materials include the "Number Patterns" Lesson Idea, which guides students through multiple ways to solve a problem. The main lesson shows students multiple ways to outline number patterns and solve to identify the relationship between the numbers in the pattern. However, while the materials ask students to explain their strategies, they do not provide enough guidance for justifying that multiple strategies can be valid. This limits students' opportunities to fully justify and analyze the efficiency of different problem-solving approaches.

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.

In the grade 5 Lesson Idea for "2-Dimensional Figures," students create riddles to describe polygons, such as "I am a figure with four sides, I have four right angles." After creating the riddles, students share their riddles with their peers and have them guess the answer.

In the grade 5 Lesson Idea for the "Coordinate System" lesson, students draw a figure on a coordinate grid. Then, they write down the steps they would take to draw the figure following the ordered pairs. After that, students exchange their instructions with a partner to see if the partner can correctly draw the shape. In this activity, the students write and discuss math, as well as complete math problems with their peers.

6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	The materials do not support educators in guiding students to share and reflect on their problem-solving approaches, including arguments.	4/6
6.2b	All criteria for guidance met.	4/4
—	TOTAL	8/10

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

The Lesson Idea for "Solve Word Problems Involving Fractions" supports educators in guiding students to reflect on their problem-solving approach, including explanations. For example, student groups are assigned word problems involving fractions and asked to work together to solve the assigned problem on chart paper. Students then explain how they solved the problem to the class; however, the materials do not include questions or prompts that educators can use to guide students in reflecting on their problem-solving approaches or arguments.

The materials include the "Numerical Expressions" Lesson Idea, which provides guidance to support students as they reflect on problem-solving approaches, including explanations and justifications. The materials do not include guidance for arguments. In the warm-up activity, the teacher writes the problem $4 + 9 \times 2 - 3$ on the board. Students are asked to solve the problem on their whiteboards. The teacher is guided to ask the students to explain and justify their answers by asking them how they arrived at them.

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

The digital platform provides automated hints and explanations when students make errors. For example, in the grade 5 "Water World" lesson, if the student switches around the numerator and denominator, the prompt states, "The numerator is the dividend and the denominator is the divisor." The materials also provide the student with a dictionary to remind themselves of the mathematical definitions.

The grade 5 Lesson Idea for the "Multiply Fractions" lesson includes an Observe and Respond component that provides guidance to support educators in offering feedback based on student responses and anticipated misconceptions. For example, the lesson states, "if a student multiplies only the numerators when multiplying fractions by fractions, then explain in multiplication, the denominators must always be multiplied, whether they are the same or different."

The Teacher Support Materials in the Lesson Idea "Adding and Subtracting Decimals include a Common Misconceptions component. This component lists misconceptions and provides prompts for teacher

responses. For example, one bullet states that some learners assume that if two numbers are written using different notation, they may not be equal, so educators show models and different ways to name the amount shown.