

# Curriculum Associates, LLC

Supplemental English Mathematics, 5

Ready Texas Mathematics, Grade 5

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
<b>Supplemental</b>	<b>9781728022314</b>	<b>Print</b>	<b>Static</b>

## Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	29	0	Flags Not in Report	Not Applicable	0

## Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. <a href="#">Intentional Instructional Design</a>	17 out of 23	74%
2. <a href="#">Progress Monitoring</a>	15 out of 20	75%
3. <a href="#">Supports for All Learners</a>	32 out of 36	89%
4. <a href="#">Depth and Coherence of Key Concepts</a>	16 out of 16	100%
5. <a href="#">Balance of Conceptual and Procedural Understanding</a>	38 out of 38	100%
6. <a href="#">Productive Struggle</a>	19 out of 19	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	The materials do not include ELPS guides for educators.	4/5
1.1b	All criteria for guidance met.	3/3
1.1c	The materials do not include guidance for selecting instructional entry points based on diagnostic assessment data. The materials do not provide diagnostic tools or recommendations that connect student performance to lesson starting points.	1/2
1.1d	All criteria for guidance met.	2/2
1.1e	All criteria for guidance met.	2/2
—	<b>TOTAL</b>	12/14

#### **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 grade 5 *Ready Texas Mathematics* materials include alignment guides that comprehensively address the Texas Essential Knowledge and Skills (TEKS) taught in the academic year's mathematical concepts. A detailed TEKS correlation guide outlines how the materials integrate each standard into the curriculum content. The *Teacher's Guide* features a comprehensive scope and sequence that spans the entire school year. This guide organizes each unit to reflect a logical progression of TEKS-aligned mathematical concepts.

The materials also provide a clear rationale for learning progressions across and within grade levels. The materials support vertical alignment through learning progression paths and unit overviews that show how students develop key concepts from prior grades, preparing students for future learning.

The materials reinforce vertical alignment throughout lesson sections, particularly in the "Guided Instruction" and "Scaffolded Questions" sections, which connect new learning to foundational skills. Grade 5's horizontal alignment is evident through the materials' consistent development and reinforcement of concepts across units, ensuring coherence within the grade level. However, the grade 5 materials do not align with the English Language Proficiency Standards (ELPS).

### **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.**

The grade 5 *Ready Texas Mathematics Teacher's Guide* includes a comprehensive implementation guide that supports effective instruction through detailed unit overviews. For example, the Unit 1 Overview outlines key TEKS-aligned content, such as interpreting numerical expressions and understanding the place-value system. This overview also provides pacing recommendations, essential academic vocabulary, prerequisite skills, and clear learning goals. Each lesson offers specific strategies for differentiation, including scaffolding techniques, along with teaching tips to address common misconceptions and adapt instruction based on student understanding.

The materials also include guidance for adapting lessons to meet diverse student needs across intervention, on-level, and advanced learning contexts. Pacing guidance tools ensure the materials are implemented within an appropriate timeframe. The materials embed just-in-time supports within each lesson's "Differentiated Instruction" sections. Intervention and challenge activities supplement such sections. These inclusions enable educators to effectively tailor instruction across various instructional contexts, such as immediate remediation and advanced enrichment.

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

The grade 5 *Ready Texas Mathematics* materials include a comprehensive *TEKS Correlation Guide* that maps each standard to specific lessons and activities within the curriculum. This guide helps align the materials with grade-level content. The materials also include Depth of Knowledge (DOK) levels to help educators understand the cognitive demands of instructional tasks.

The materials provide TEKS correlation charts at the beginning of the "Overview" section of the *Teacher's Guide* and at the beginning of each unit. These charts outline prerequisite skills. While the materials include general differentiation strategies, such as support and extension suggestions within lessons, they do not offer guidance for selecting instructional entry points based on diagnostic assessment data. The materials present skill entry points by grade level and by the TEKS rather than tailoring them to individual student diagnostic performance. The materials thus do not provide recommended skill entry points based on diagnostic assessment results.

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

The grade 5 *Ready Texas Mathematics* materials include protocols and corresponding guidance to support unit internalization. For example, Unit 1 of the *Teacher's Guide* offers a detailed unit overview that outlines core mathematical concepts, specific TEKS alignment, pacing recommendations, essential

vocabulary, prerequisite knowledge, and concept progressions, helping teachers internalize the unit structure, instructional goals, and key focus areas before teaching. The Ready Central site provides instructional planning documents, including a "Unit Preparation Template" for unpacking the unit and a "Lesson Prep Guide Graphic Organization" to help teachers prepare for individual lessons. The materials also include models, progressions, and teaching tips that help teachers unpack unit objectives and internalize key concepts.

The materials embed corresponding guidance for lesson internalization within the "Concept Extension" and "Guided Instruction" sections of lessons. These sections deepen student understanding of mathematical relationships and encourage students to apply and build on their learning.

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

The grade 5 *Ready Texas Mathematics* materials include comprehensive resources and guidance specifically designed for instructional leaders to support educators in implementing the curriculum as intended. The Ready Central site offers videos, recommended professional development structures, classroom "look-fors," and leadership actions aligned with lesson design. All of these resources promote teacher capacity and ensure fidelity of use.

Instructional leaders can access planning templates, pacing tools, and guiding questions within the Ready Central site's Leadership Resources tab. Instructional leaders can use these resources during lesson planning sessions and classroom observations to promote consistent, high-quality instruction across classrooms.

The "Success Central" section of the online platform includes numerous articles that provide practical advice on using the materials, facilitating the try-discuss-connect framework, pacing the academic year, and understanding lesson and session structures. The online Teacher Toolbox further supports educators with training videos, planning tools, implementation tips, and discourse support.

## 1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	The materials do not include ELPS guides for educators.	5/7
1.2b	This guidance is not applicable to the program.	N/A
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 student(s).	0/2
—	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.**

The grade 5 *Ready Texas Mathematics Teacher's Guide* features detailed, structured daily lesson plans with clearly defined learning objectives aligned to the TEKS. It also includes lesson components such as "Teacher-Led Instruction (Model it)," "Guided Practice," and "Independent Practice." Each of these components include suggested time frames to support pacing.

Teacher materials include guidance on when and how to use student materials. The materials also incorporate checks for understanding to promote academic language and discourse through various group formats. The materials do not feature detailed pacing guides, lesson components, or assessments that correlate with the ELPS.

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

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

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

The grade 5 *Ready Texas Mathematics* materials provide Spanish versions of the student workbook, giving Spanish-speaking students access to lesson content and practice. The static materials do not include family-facing resources in either Spanish or English for each unit, such as parent letters, unit summaries, home activities, or suggestions for supporting student learning at home.

The materials do not include embedded guidance for families in either language on how to reinforce academic progress outside the classroom.

## 2. Progress Monitoring

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

### 2.1 Instructional Assessments

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.1a	All criteria for guidance met.	2/2
2.1b	All criteria for guidance met.	2/2
2.1c	This is a static program. The materials do not include digital assessments with printable versions or accommodations, such as text-to-speech, content, and language supports, or calculators that educators can enable or disable for individual students.	Not Scored
2.1d	The materials do not include TEKS-aligned diagnostic assessments with varying levels of complexity or interactive item types.	0/4
2.1e	All criteria for guidance met.	4/4
—	<b>TOTAL</b>	8/12

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

The grade 5 *Ready Texas Mathematics* materials include the definitions and intended purposes of instructional assessments. The *Teacher's Guide* defines various assessment types, such as "TEKS Practice" and "Differentiated Instruction." The *Teacher's Guide* explains their formats and how they integrate key concepts and skills.

The materials provide clear guidance on the purposes of these assessments, such as identifying student misconceptions, informing small group instruction, and supporting remediation or extension. For instance, the "TEKS Practice: At a Glance" section highlights how tasks align with test expectations, while lesson-end assessments include remediation tables such as "If the error is . . . Students may . . . To remediate . . ."

The materials explicitly define the "Think-Share-Compare" routine, detailing when and why it is used. This information reinforces the role of formative assessments in instruction and student learning.

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

The grade 5 *Ready Texas Mathematics* materials provide guidance to ensure the consistent and accurate administration of instructional assessments. Each lesson includes tools such as time allotments, answer keys, and scoring rubrics to support uniform assessment delivery.

The *Teacher's Guide* recommends a 60-minute structure for guided and independent practice. The "TEKS Practice" section includes item-specific DOK levels, while the "At a Glance" section includes instructional notes. Answer keys include rationales and sample solutions to support accurate scoring.

The "Differentiated Instruction" section offers error analysis charts with remediation strategies, which reinforce the accurate interpretation of student responses.

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

The materials do not include assessments at the end of each unit, which are only in the *Student Instructional Book*. The lessons include TEKS practice and performance tasks that allow students to demonstrate mastery of the materials covered in lessons. The materials do not include digital assessments, printable versions or accommodations, such as text-to-speech, content and language supports, or calculators that can be enabled or disabled for individual students.

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

The materials do not meet the criteria for including diagnostic assessments with TEKS-aligned tasks or questions. The materials include TEKS Practice Assessments with different item types and varying DOK levels, but these do not include interactive or adaptive components. The product is static and does not contain printed or online diagnostic assessments.

**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 *Ready Texas Mathematics* materials include a variety of formative assessments with TEKS-aligned tasks or questions that demonstrate varying levels of complexity, meeting the requirement for at least two (and more than two) levels of complexity.

"TEKS Practice" sections include questions aligned to multiple DOK levels, such as DOK 1 for procedural tasks, DOK 2 for application problems, and DOK 3 for reasoning and justification. For example, in grade 5, Unit 1, Lesson 7, students complete basic multiplication problems, solve real-world word problems, and explain their strategies or critique reasoning aligned with TEKS 5.3A and 5.3B. The materials consistently integrate formative assessment opportunities through "Guided Instruction" checkpoints as well as "Differentiated Instruction Assessment" and "Remediation" tools.

The formative assessments in the materials include interactive item types. Each assessment contains two or more interactive item type questions. For example, grade 5, Lesson 26 contains a variety of question

types. The lesson contains multiple-choice, hot spot, fill-in-the-blank, true or false, and short answer questions, as well as Part A and Part B questions.



## 2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	All criteria for guidance met.	3/3
2.2b	All criteria for guidance met.	1/1
2.2c	The materials do not include a tool for teachers to track student progress.	1/2
2.2d	All criteria for guidance met.	2/2
2.2e	This guidance is not applicable to the program.	N/A
—	TOTAL	7/8

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

The materials include scoring information and guidance for interpreting student performance, particularly in the "TEKS Practice" sections, which offer correct answers, explanations tied to mathematical reasoning, and associated DOK levels to support educators in evaluating student proficiency. For example, in grade 5, Unit 3, Lesson 13, TEKS Practice Question 4 provides a rationale for the correct answer (A), references the use of a volume formula, and includes a DOK level to guide teacher interpretation.

The materials also include rubrics for performance tasks and remediation tables that align common errors with student misconceptions and recommended instructional responses. The materials provide a rationale for each correct and incorrect response. The materials often model how students should approach solving problems.

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

The materials provide guidance for using included tasks and activities to respond to student trends in performance on assessments. Each lesson features an "Assessment and Remediation" closure question. A chart accompanies this question, which lists common student errors, explanations for those errors, and targeted remediation suggestions. "Challenge" activities are available for students who demonstrate mastery on these tasks, which extend students' learning.

The "Facilitating Small Group Instruction" resource in the Teacher Toolbox directs teachers to analyze multiple data sources, including informal observations, prerequisite reports, lesson quizzes, unit assessments, "Think-Share-Compare" responses, quick checks, and student work. Such analysis informs instruction and helps teachers identify student performance trends.

Instructional resources include modeled and guided instruction for reteaching grade-level content, tools for instruction that address prerequisite skills, "Hands-on" and "Challenge" activities that offer opportunities to reteach or extend learning, "Math Center" activities that offer differentiated practice, and unit games that include collaborative critical thinking practice. The materials provide these resources within the Teacher Toolbox, supporting responsive, data-driven teaching.

The *Ready Texas Mathematics* materials integrate various supports, including concept extension, mathematical discourse, visual models, error alerts, Mathematical Process Standard (MPS) tips, real-world connections, and hands-on activities during lessons to address learning needs.

## **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 grade 5 *Ready Texas Mathematics* unit self-check chart allows students to track and monitor their learning progress throughout each unit.

Students can use "Daily Learning Reflection" resources to record their learning and questions. The materials encourage teachers to require students to self-monitor their learning throughout the unit.

The "Facilitating Small Group Instruction" resource guides teachers to use data from prerequisite reports, informal observations, quick checks, "Think-Share-Compare" routines, and student work to monitor progress and form small groups. These data points enable teachers to evaluate mastery and instructional decisions.

Formative assessments as well as "Solutions and Explanations with Error Alerts" and "Assessment and Remediation" charts offer ongoing opportunities to assess student mastery and address misconceptions.

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

The materials provide prompts that support educators in conducting frequent checks for understanding at key points throughout each lesson or activity. The materials also provide detailed guidance to implement these checks. The *Teacher's Guide* includes step-by-step instructions and embedded questions, such as those in the Mathematical Discourse and Real-World Connection boxes. For example, grade 5, Lesson 18 directs teachers to ask students to list units of measurement from smallest to largest. The lesson encourages them to consider real-life applications for measurement, such as in construction and cooking. Each lesson contains discussion topics, mathematical discourse questions, concept extension questions, and practice problems that progress from modeled to guided to independent work. Lessons contain guiding questions to monitor comprehension. The *Teacher's Guide* offers strategies to support students who struggle during checks, including reteaching prerequisite skills, using manipulatives, and providing additional practice or challenge activities.

The Teacher Toolbox supplements these resources with suggestions for small group instruction and differentiated interventions that target learning gaps. "Try It" solutions include error alerts that guide teachers to identify and address student difficulties, ensuring continuous formative assessment throughout the lessons.

**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	This program is static and do not include digital accommodations, such as text-to-speech, content and language supports, or calculators that educators can enable or disable to support individual students.	Not Scored
3.1e	All criteria for guidance met.	2/2
—	<b>TOTAL</b>	9/9

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

The 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 *Teacher's Guide* includes a Differentiated Instruction page in every lesson with targeted intervention activities using hands-on tools and visual models, such as using area models to multiply fractions in grade 5, Lesson 14. The Teacher Toolbox offers "Facilitating Small Group Instruction" and "Tools for Instruction" resources, which include explicit guidance based on assessment data and skill-specific strategies to support student progress.

"Prerequisite Ready" lessons on the digital platform support foundational understanding by linking content from prior grades. For example, the materials link to grade 4 lessons for students struggling with multiplying whole numbers. These lessons provide scaffolded activities using base-ten blocks, problem examples, and student discussion. The "Prerequisites Report" document identifies which foundational topics to teach before each lesson. For example, the document suggests reviewing the multiplication and division of decimals prior to grade 5, Lesson 5, which focuses on estimation. Embedded misconception alerts and remediation charts within lessons help educators identify and respond to student errors in real time.

### **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 materials include embedded supports for developing academic vocabulary and clarifying unfamiliar references in text.

The ELL Support boxes in the *Teacher's Guide* consistently include embedded supports, which provide strategies such as using visuals, modeling language, clarifying multiple-meaning words, offering sentence frames, and connecting mathematical vocabulary to real-world contexts. For example, in Lesson 6, the ELL Support box addresses the term *reasonable* by distinguishing its mathematical and everyday meanings through a content-specific example. Lesson 12 prompts teachers to explain and model the dual use of the word *estimate* as both a noun and a verb. Lesson 7 includes a fill-in-the-blank sheet that reinforces multiplication vocabulary through structured practice. Lessons begin with vocabulary lists that include student-friendly definitions for terms such as *hierarchy* or *volume*. Embedded supports encourage discussion of how terms can be used in different contexts.

The materials introduce vocabulary terms at the beginning of each lesson. The materials also provide explicit educator guidance for pre-teaching academic vocabulary or unfamiliar references before instruction begins.

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

The materials include explicit educator guidance for enrichment activities designed for students who have demonstrated proficiency in both grade-level and above-grade-level content and skills. Each lesson features a "Challenge" activity that deepens student understanding and promotes rigorous engagement, such as determining how many gallons of paint are needed to cover a room's area.

Differentiated Instruction pages follow each grade 5 lesson. These pages include "Challenge" activities that offer opportunities for extended reasoning and creative problem-solving beyond the core lesson.

"Enrichment" activities synthesize content to deepen students' knowledge and provide ongoing challenges. For example, in the grade 5 "Building Projects" activity, students decide what items they can construct from a given amount of wood.

Embedded mathematical discourse prompts and "Extend the Math" questions function as informal extension opportunities. For example, in Lesson 9: Multiply Decimals, students explain their multiplication strategies and apply their understanding to multistep decimal problems, encouraging advanced reasoning beyond procedural tasks. The grade 5 lessons contain Concept Extension boxes, "Challenge" activities at lesson conclusions, and "On-Level" activities. These inclusions allow targeted

support for varying proficiency levels. For instance, Unit 3, Lesson 17's "On-Level" activity directs teachers to guide students in building quadrilaterals with geoboards and geobands. The "Challenge" activity in the same lesson asks students to generate multiple names for drawn figures. This range of structured enrichment and extension activities includes explicit educator guidance for students demonstrating proficiency at and beyond grade-level expectations.

### **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 the online Teacher Toolbox, a digital component for teachers. In this digital space, teachers can access various resources, including the *Teacher Resource Guide*, Teacher Toolbox, small-group intervention documents, and digital student pages. The materials do not include digital components that offer accommodations, such as text-to-speech, content and language supports, and calculators that educators can enable or disable to support individual students.

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

The materials include educator guidance on offering options and supports for students to demonstrate understanding of mathematical concepts in various ways, such as perform, express, and represent. The introduction to the *Teacher's Guide* outlines multiple embedded strategies, including step-by-step instructions, mathematical discourse, mathematical process standards tips, visual models, hands-on activities, and real-world connections. These strategies guide teachers in delivering multimodal learning experiences.

"Mathematical Discourse" sections prompt teachers to ask open-ended questions that encourage verbal explanations, model drawing, and alternative strategies. Differentiated Instruction pages suggest tools to support varied expression, such as graphic organizers and manipulatives.

Differentiated Instruction pages and "Assessment" sections provide further guidance using tools such as graph paper and structured prompts, supporting students' ability to express understanding through drawing, modeling, and oral or written explanation. Throughout the curriculum, the materials consistently support a variety of student response formats, fostering opportunities to perform, express, and represent mathematical understanding.

Lessons contain point-of-use supports such as Visual Model boxes and Hands-on Activity boxes, which prompt students to use manipulatives, create drawings, and engage in verbal explanations. For example, in Lesson 14: Multiply Fractions, students use area models and repeated addition to represent

multiplication. In Lesson 20: Find Volume Using Unit Cubes, students build physical models, draw diagrams, and explain their reasoning.

## 3.2 Instructional Methods

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

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

The grade 5 *Ready Texas Mathematics* materials provide explicit prompts and guidance for educators to build knowledge by activating students' prior knowledge. For example, the materials include structured teacher directions, such as "Discuss the model and have students explain it." The materials also include visual supports such as area models and place-value charts to reinforce previously taught concepts.

The materials anchor big ideas by consistently framing key mathematical concepts. For example, in lessons such as "Compare and Round Decimals," students explore how rounding applies to whole numbers and decimals. The materials highlight key patterns, features, and relationships through multiple means of representation, including base-ten blocks, fraction models, visual diagrams, symbolic notation, and real-world applications. For example, lessons use grid paper and cubes to model measurement concepts and engage students in discourse. Lessons employ questions such as "Which unit of measure is better to use?" or "What questions could be answered using this frequency table?"

Learning progressions in the *Teacher's Guide* show how lessons connect across grade levels. Components such as "Picture It," "Model It," "Connect It," and "Hands-on" activities provide varied visual, symbolic, and verbal representations to ensure mathematical relationships are fully developed and accessible.

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

The grade 5 *Ready Texas Mathematics* materials include educator guidance for effective lesson delivery and facilitation using various instructional approaches, employing more than two methods. The materials provide step-by-step instructional guidance within each lesson, supporting direct instruction through modeled and guided practice, independent work, and structured discourse prompts.



Lessons incorporate manipulative-based strategies (such as using cubes to build prisms), visual strategies through three-dimensional diagrams and visual models, and oral reasoning through collaborative discussion and reflection questions. Each lesson offers a consistent framework that includes "Learning Progression," "Lesson Objectives," and "Lesson Structure" sections, which include pacing suggestions and instructional tips.

The Teacher Toolbox offers access to fluency practice, interactive tutorials, small group activities, student-led center work, and lessons that reteach content. Instructional approaches include "Challenge" and "On-Level" activities, hands-on tasks, and real-world connections, providing more than two methods of lesson delivery and facilitation.

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

The materials provide comprehensive multi-tiered intervention methods that address various types of practice. These types of practice include guided, independent, hands-on, and collaborative activities, as well as diverse instructional structures such as whole group, small group, partner, and individual work.

Each lesson includes a "Differentiated Instruction" section that offers tiered supports such as assessment and remediation, hands-on activities, and challenge activities. These supports enable teachers to tailor instruction based on student needs. The materials consistently include explicit and embedded educator guidance, offering clear directions on grouping strategies, using prompts for mathematical discourse, and employing tools for monitoring understanding.

Online resources in the Ready Central Teacher Toolbox further support effective implementation through training videos and planning aids. The materials emphasize flexible, responsive instruction by providing teachers with structured routines, targeted remediation strategies, and a variety of practice opportunities aligned with multi-tiered intervention frameworks.

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

The grade 5 *Ready Texas Mathematics* materials include enrichment and extension methods that support various forms of engagement through hands-on activities, deeper problem-solving, and real-world application tasks. "Challenge" activities on the Differentiated Instruction page engage students in critical thinking, collaboration, and creative reasoning, such as designing a dream home with specific parameters or exploring relationships between rectangles on a coordinate plane.

The materials provide explicit educator guidance for effective implementation, including recommendations for group size (individual or pairs), suggested materials (such as rulers or string), and prompts to facilitate mathematical discourse. Step-by-step directions guide teachers to scaffold understanding through visual models, real-world connections, and guided questioning, supporting

differentiated instruction that meets diverse learner needs and promotes meaningful enrichment and extension opportunities.

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

The grade 5 *Ready Texas Mathematics* materials include prompts and guidance to support educators in providing timely feedback during lesson delivery. Lessons embed mathematical discourse questions with possible student responses to help teachers assess understanding and deliver immediate, corrective feedback. For example, teachers can suggest using a number line to interpret dividing a whole number by a unit fraction or using area models to solve multiplication problems.

Each lesson includes guided instruction that prompts educators to circulate, observe, and address misconceptions. Student misconception alerts and error alerts support this instruction, which identify common errors and provide explanations and strategies. "Modeled Instruction" sections contain specific questioning strategies designed to reveal student thinking, such as identifying patterns or selecting models to solve contextual problems.

MPS tips highlight targeted opportunities to guide students in reasoning and problem-solving, ensuring educators have consistent, structured support for providing real-time feedback throughout instruction.

### 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	The materials do not include educator guidance on providing and incorporating linguistic accommodations for all levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language; the materials only include guidance for one level of academic language support.	1/4
3.3b	This guidance is not applicable to the program.	N/A
3.3c	The materials do not include guidance for implementation within the framework of Texas state-approved bilingual or ESL program models.	0/1
3.3d	All criteria for guidance met.	8/8
3.3e	This guidance is not applicable to the program.	N/A
—	<b>TOTAL</b>	9/13

**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 grade 5 *Ready Texas Mathematics* materials include educator guidance on providing and incorporating linguistic accommodations for at least one level of language proficiency (as defined by the ELPS). The materials engage students in using increasingly more academic language.

The *Teacher's Guide* includes ELL Support boxes throughout lessons, which provide general guidance. This guidance includes calling attention to unfamiliar vocabulary or problem contexts. It also includes offering suggestions such as using visual cues, realia, and concrete representations (e.g., identifying square and cubic units using two- and three-dimensional figures or distinguishing "tree diagrams" based on shape). Supports help scaffold understanding for English learners. However, such supports do not specify accommodations for additional ELPS proficiency levels, such as intermediate, advanced, or advanced-high.

**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 do not include implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL programs. The *Ready Texas Mathematics* materials provide general strategies for English learners, including embedded ELL supports, vocabulary scaffolds, and suggestions for academic discourse. However, the materials do not differentiate these strategies based on proficiency levels, and the strategies do not align with specific bilingual or ESL program models.

The materials do not reference or support implementation within dual language, transitional bilingual, or content-based ESL frameworks. There is no guidance within the *Teacher's Guide* or Teacher Toolbox related to classroom structures, instructional delivery, or planning specific to Texas-approved bilingual or ESL program models. The materials address the ELPS through alignment documents and lesson-level supports, but these resources do not fulfill the requirement for program-specific implementation guidance.

**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 support emergent bilingual students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through oral and written discourse. Lessons are structured to promote oral discourse by guiding teachers to model language structures, use precise academic vocabulary, and prompt students to justify reasoning and compare solution paths.

Students participate in rich mathematical discussions by restating problems, engaging in peer conversations, and using "Talk About It" and "Pair/Share" routines. For example, students orally present estimation strategies using classroom objects and engage in conversations comparing units of measure. The materials further support comprehension and vocabulary development through written discourse as students write explanations, model problems, reflect on strategies, and use mathematical terminology in writing.

The materials include resources such as ELL Support boxes and mathematical discourse prompts, which encourage students to connect everyday and mathematical language. These resources draw on students' prior knowledge through activities such as organizing steps with visuals and identifying cognates. Embedded routines such as "Three Reads," "Notice and Wonder," and "Say It Another Way" guide students through interpreting and responding to problems in both oral and written formats. Such routines help students make cross-linguistic connections and deepen their understanding of academic content.

**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 grade 5 *Ready Texas Mathematics* materials provide practice opportunities and instructional assessments throughout learning pathways that require students to demonstrate depth of understanding aligned to the TEKS. Each lesson includes problem-solving activities such as "Concept Extension," "Mathematical Discourse," and "Differentiated Instruction" tasks that promote varied depths of knowledge and conceptual reasoning. For example, students explain strategies used in multiplication, interpret data in real-world contexts, and apply divisibility rules, all of which require critical thinking and justification.

Instructional assessments within lessons, including "TEKS Practice" sections, increase in complexity and require students to perform computation and explain their methods. Such assessments address a range of cognitive levels and align with the TEKS.

#### **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 grade 5 *Ready Texas Mathematics* materials provide questions and tasks that increase in rigor and complexity, leading to both grade-level and above-grade-level proficiency in the mathematics TEKS. Students progress from solving simple measurement conversion problems to creating complex real-world word problems. Students use scaffolded lessons that move from hands-on models to abstract applications.

Each lesson includes enrichment and challenge tasks that extend thinking through open-ended, real-world contexts. These tasks promote higher-order reasoning and require students to justify their strategies. For example, students use "Mystery Expression Boxes" for simplifying expressions and

partner-exchanged division word problems. Hands-on activities, paired with mathematical process standard tips, further deepen students' conceptual understanding and problem-solving skills.

While digital assessments are limited, interactive tutorials and resources are accessible via Google Classroom and support diverse learning needs. Overall, the materials provide a clear progression in rigor and complexity across questions, tasks, and enrichment opportunities. The materials thus fully support grade-level and above-grade-level proficiency aligned to the TEKS.

## 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
—	<b>TOTAL</b>	6/6

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

The materials demonstrate coherence across concepts horizontally within the grade level by connecting patterns, big ideas, and relationships. The grade 5 *Ready Texas Mathematics Teacher's Guide* organizes lessons within units that link students' prior knowledge to new concepts. This organization supports students' coherent understanding of mathematical ideas. Unit 2 follows a clear sequence from adding and subtracting fractions to multiplying and dividing fractions, demonstrating how concepts logically build across lessons. Volume lessons connect students' prior understanding of area and multiplication to three-dimensional measurement, illustrating the relationship between dimensions. Tasks involving evaluating expressions with parentheses integrate multiplication, addition, subtraction, and division, showing how operations interact in structured ways.

The materials list learning progressions and prerequisite skills at the start of each unit, helping educators identify and connect patterns across lessons. These inclusions ensure that instruction supports horizontal coherence throughout the grade level.

"Real-World Connection" tasks, such as balancing income and expenses, allow students to apply addition and multiplication in meaningful contexts. These tasks reinforce how concepts are related.

### **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 materials demonstrate coherence vertically across concepts and grade bands, including connections from grades K–6, by connecting patterns, big ideas, and relationships. The "Learning Progression" section at the start of each lesson outlines how concepts build from earlier grades and prepares students for future learning. In Lesson 9, students apply their prior knowledge of whole number operations and decimal place value from grades 1–4 to multiply decimals using area models. This application prepares students to use the standard algorithm in grade 6. In Lesson 11, students extend their grade 4 work with equivalent fractions to add and subtract fractions with unlike denominators, laying the foundation for rational number operations in grade 7. Lesson 13 builds on strategies from grades 1–4 for dividing whole numbers and introduces decimal division.



"Explore It" sections activate students' prior knowledge through familiar models and strategies, helping students make sense of new content by linking it to previously learned skills.

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

The materials demonstrate coherence across lessons and activities by connecting students' prior knowledge of concepts and procedures to the mathematical concepts to be learned in the current and future grade levels. Each lesson contains a "Learning Progression" section that outlines how previously learned content supports new learning and prepares students for future grade-level expectations. The materials connect students' conceptual understanding of fraction equivalence and operations from grade 4 to more advanced grade 5 applications, such as adding and subtracting fractions with unlike denominators and solving contextual problems. This understanding then serves as a foundation for grade 6 concepts such as ratios and proportional reasoning.

In Unit 2, Lesson 15, students similarly develop procedural knowledge as they apply whole-number multiplication strategies to multiply fractions and solve problems. This work promotes students' procedural fluency with rational numbers and algebraic reasoning in middle school.

"Explore It" tasks and step-by-step guidance activate students' prior knowledge, allowing them to apply familiar procedures to increasingly complex mathematical situations. Visual unit flowcharts support students' coherence by showing which lessons build on earlier content and which will prepare students for upcoming content. MPS Tip boxes in lessons, such as in Lesson 30, prompt students to connect procedures such as decimal addition to real-world applications involving money.

## 4.3 Coherence and Variety of Practice

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

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

The materials provide spaced retrieval opportunities with previously learned skills and concepts across learning pathways. To achieve this outcome, the materials integrate review and reinforcement throughout units, lessons, and activities. Unit 2 practice includes problems aligned with Lessons 11–16. These problems require students to recall and apply operations with fractions. The materials thus incorporate the distributed review of both procedural and conceptual knowledge.

Warm-up and fluency tasks revisit estimation strategies with whole numbers, fractions, and decimals, supporting students' retention of key skills across number types. Lessons prompt students to retrieve foundational knowledge, such as knowledge of common denominators and simplification, before solving complex problems.

Students build on prior grade-level learning. For example, students apply grade 4 measurement skills to solve grade 5 conversion word problems. The materials also introduce concepts such as the coordinate plane sequentially. For example, Lesson 23 builds on concepts that Lesson 22 introduced, reinforcing learning across the pathway.

Unit introductions and lesson objectives in the *Teacher's Guide* outline prerequisite knowledge, further supporting spaced retrieval and coherence throughout the materials' instructional design.

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

The materials provide interleaved practice opportunities with previously learned skills and concepts across learning pathways. The materials incorporate instructional routines and problem sets that intentionally prompt students to apply their prior knowledge to new content. In grade 5, students use previously learned strategies for adding and subtracting fractions to solve multistep word problems. Students also extend their understanding of division to include operations with unit fractions.

Lessons routinely include an "Explore It" and "Think-Share-Compare" structure, guiding students to draw on previously learned strategies when approaching new problems. The materials integrate multiple domains in independent and TEKS practice, in which students solve problems involving a mix of operations, such as addition, subtraction, multiplication, and division. The materials provide interleaved

practice opportunities in lessons that require students to use volume to reinforce area and multiplication skills. Students use their earlier knowledge of whole number multiplication strategies from Lesson 7 to support their understanding of fraction multiplication in Lesson 13.

Guided instruction includes scaffolded questions that reinforce students' conceptual understanding by building connections across measurement, geometry, and numerical operations.

## 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
—	<b>TOTAL</b>	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 tasks and questions that require students to interpret, analyze, and evaluate models and representations for mathematical concepts and situations. Students interpret visual models, such as stacked pennies, to distinguish between prime and composite numbers. Students also use circular fractional models to evaluate operations involving the multiplication and division of fractions.

In Lesson 19, students interpret and analyze cubic unit models to understand volume by connecting layers of cubes to multiplication expressions.

Lesson 23 asks students to evaluate coordinate plane models by determining if points are correctly plotted and whether graphs accurately reflect relationships between  $x$  and  $y$  values. Lesson 25 guides students to interpret frequency tables, analyze how data is represented in bar graphs, and evaluate the accuracy and clarity of each representation.

The Teacher Toolbox for Lesson 4 supports student analysis of factor pairs through interactive matching and pattern identification. In Lesson 11, students interpret and solve real-world problems using bottle images, determining the appropriate operations and modeling the solutions. Lesson 12 prompts students to evaluate situations in daily life, such as cooking or construction, in which it is necessary to add and subtract fractions. Such lessons reinforce the evaluation of mathematical models in meaningful contexts.

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

The materials include questions and tasks that require students to create concrete models and pictorial representations of mathematical situations. Students use blocks to construct physical models of volume in Lesson 19, fraction tiles to model the multiplication of fractions by whole numbers in Lesson 13, and centimeter cubes to build and subtract fractional quantities in Lesson 12. In Lesson 14, students divide real-world items into fractional servings, reinforcing their conceptual understanding through concrete

modeling. Students develop pictorial representations in tasks such as plotting ordered pairs on a coordinate grid. In Lesson 24, students create graphs to display input-output relationships. They use graph paper to build and label the first quadrant of the coordinate plane.

In Lesson 1 and Lesson 19, students use visual tools such as pictures of blocks and interactive decimal models to illustrate mathematical ideas and relationships. The materials consistently engage students in building tangible and visual models to represent and explore mathematical concepts.

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

The materials provide questions and tasks that require students to apply their conceptual understanding to new problem situations and contexts. In Lesson 30, students use their understanding of decimal operations to balance a budget by analyzing income and expenses, making real-world financial decisions that demonstrate their application of mathematics in unfamiliar scenarios. Lesson 18 engages students in solving multistep word problems involving measurement conversions, such as calculating the total number of cups needed for multiple batches of punch. Such problems require students' reasoning about volume and multiplication. Lesson 20 asks students to use visual models to explore volume in cubic units and connect these concepts to real-life situations such as packing a delivery truck. Lesson 8 includes a "Challenge" activity in which students create and solve division word problems with three-digit dividends and two-digit divisors, promoting students' transfer of conceptual understanding to new contexts.

The materials also include questions prompting students to compare visual models with fractional values and explain their reasoning. In addition, the materials include tasks that encourage connections between volume and everyday applications, such as determining the amount of soil needed for a garden bed.

## 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 grade 5 *Ready Texas Mathematics* materials provide tasks that are designed to build the automaticity and fluency necessary to complete grade-level mathematical tasks. The materials include repeated and structured practice with computation and problem-solving. For example, Lessons 9–10 of Unit 1 focus on multiplying and dividing decimals through scaffolded routines that promote accuracy, place-value understanding, and repeated reasoning.

The materials include practice sheets in which students identify prime and composite numbers and convert fractions to decimals, supporting students' quick recall of essential number properties and operations. The Teacher Toolbox offers interactive tutorials with corrective feedback and fluency drills to reinforce speed and accuracy. Lesson 10 and Lesson 21 target fluency through tasks that involve dividing whole numbers by decimals and calculating the volume of rectangular prisms using multiplication. These tasks promote students' efficiency and proficiency with grade-level mathematical tasks.

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

The grade 5 *Ready Texas Mathematics* materials provide opportunities for students to practice applying efficient, flexible, and accurate mathematical procedures throughout learning pathways. The materials guide students to solve problems using multiple strategies. For example, in Lesson 10: Divide Decimals, students choose from partial products, area models, or standard algorithms, supporting their efficiency and flexibility. Lessons promote accuracy through estimation, justification, and reflection questions that require students to evaluate the reasonableness of solutions. In Lesson 14: Multiply Fractions, students apply visual models, simplify before multiplying, and engage in "Pair/Share" discussions to explain and justify methods using precise mathematical language.

The materials encourage flexible procedures through multiple representations, including visual and mathematical models. For example, students analyze the relationship between fractional parts such as fourths and halves. "Guided Practice" activities across lessons require students to interpret models,

reason through procedures, and engage in mathematical discourse that reinforces their understanding, efficiency, and strategic selection of appropriate 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 grade 5 *Ready Texas Mathematics* materials provide opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy throughout learning pathways. Lessons require students to compare and reflect on multiple strategies, such as using area models or partial products, before transitioning to the standard algorithm for multiplying multi-digit numbers. Lessons thus promote students' evaluation of the efficiency and flexibility of various methods. In Lesson 14, students evaluate area models and equations when multiplying fractions, analyzing which approach simplifies steps or reduces errors. Lesson 10 provides opportunities for students to identify and correct errors in decimal placement, supporting procedural accuracy. The lesson also allows students to compare estimation with standard division methods for precision and efficiency. Lesson 21 prompts students to compare solutions using visual models and formulas when solving perimeter, area, and volume problems.

The materials routinely incorporate "Think-Share-Compare" routines. These routines require students to evaluate their selection of strategies by guiding students through problem-solving, discussion, comparison, and reflection.

Interactive tutorials support students' evaluation of methods using visual models and equations, such as when students multiply a unit fraction by a whole number in Lesson 13. Lesson 27 reinforces this work through group discussions of varied solution strategies for multistep problems, such as modeling, organizing, or grouping amounts from a dot plot.

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

The grade 5 *Ready Texas Mathematics* materials contain guidance to support students in selecting increasingly efficient approaches to solve mathematics problems. Students determine the area of a rectangle using two methods: counting squares and multiplying length by width. The materials prompt educators to explain that drawing and counting squares is not always efficient, especially with larger numbers. Students then apply multiplication to practice more efficient area calculations.

In solving gross and net income problems, educators guide students toward efficient problem-solving models that involve analyzing information and evaluating methods to simplify solutions. Lesson 14 guides students from using area models to using numerical strategies for multiplying fractions. The lesson employs prompts such as "What other models could you use to illustrate this problem?" and "Which model do you think is more useful?" These prompts encourage students' selection of efficient

procedures. Lesson 16 supports students in dividing unit fractions through visual models and numerical equations with questions that promote discussion on choosing efficient strategies. Such questions include the following: "How does finding the common denominator help you divide?" Grade 5, Lesson 6 encourages students to solve multistep problems using models, number lines, and standard algorithms. The lesson includes opportunities for students to try multiple approaches and evaluate the reasonableness of their answers.

Interactive tutorials in the Teacher Toolbox provide additional support. For example, in Lesson 14, students practice multiplying fractions using models and equations. In Lesson 21, students find the volume of rectangular prisms by multiplying height by base area or by multiplying edge lengths, reinforcing efficient problem-solving strategies.



## 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
—	<b>TOTAL</b>	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 emphases of the TEKS. Lessons develop students' conceptual understanding through visual models, drawings, manipulatives, flow charts, and diagrams that help students grasp the meaning behind mathematical operations, such as multiplying fractions, converting measurements, dividing decimals, exploring volume, and classifying geometric figures.

Activities engage students in reasoning, discourse, and exploration, such as filling prisms with unit cubes to understand volume or using repeated addition to understand fraction multiplication. The materials then transition to a procedural emphasis by providing structured opportunities for students to apply formulas and standard algorithms, solve multistep problems, and explain their reasoning using mathematical language.

Teacher and implementation guidance features a consistent balance of conceptual and procedural instruction aligned to the TEKS. Such guidance includes questioning, active problem-solving, and opportunities for students to reflect on when and why specific strategies or procedures are appropriate.

### 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 provide questions and tasks that allow students to use concrete models, pictorial representations, and abstract models. Lessons begin with hands-on activities such as using fraction circles to divide by fractions, building rectangular prisms with unit cubes to explore volume, and manipulating geoboards to create quadrilaterals, fulfilling the TEKS requirements for concrete modeling.

Pictorial and visual tools include number lines, coordinate grids, pattern tables, decimal hundred charts, and graphs that support students' conceptual understanding through visual reasoning.

Later lesson phases address abstract reasoning. In these lessons, students solve symbolic fraction division problems, use standard algorithms for decimal multiplication and fraction addition, and interpret coordinate plane diagrams without concrete or pictorial aids. Designated sections, such as "Hands-on Activities," "Picture It," "Model It," and "TEKS Practice," provide structured progression through concrete,

pictorial, and abstract models. The materials consistently align with the TEKS expectations by integrating multiple representations across lessons and supporting student understanding at all representational stages.

**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 comprehensive supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic, numeric, or algorithmic) concepts, as required by the TEKS. Students use blocks to build solid figures in order to model volume. Students then demonstrate how to draw the corresponding vertices, linking physical models to abstract geometric representations.

The *Ready Texas Mathematics* materials incorporate "Think-Share-Pair" routines, a six-step method guiding students from concrete experiences to abstract understanding. These routines include explicit examples for teachers that are aligned with each TEKS and instructional concept. In Lesson 20, students construct rectangular prisms with unit cubes before applying the volume formula " $V = l \times w \times h$ ," supporting the transition from concrete to symbolic volume calculations. Lesson 13 uses diagrams, such as rectangles, to model fraction multiplication before connecting to multiplication equations.

In Lesson 23, representational models include coordinate grids, which reinforce numerical relationships through visual representations. The materials prompt students to define and explain their models. For example, in Lesson 16, students draw or act out fraction division word problems and explain the mathematical meaning of their models. In Lesson 25, students interpret stem-and-leaf plots and circle graphs, articulating how the visual elements correspond to data values. In this lesson, students also discuss appropriate representations, such as choosing between stem-and-leaf and dot plots.

The *Teacher's Guide* provides hands-on activities and visual supports that expand students' understanding of how to represent and communicate mathematical concepts. Such activities and supports consistently connect concrete, representational, and abstract mathematical ideas throughout the lessons.

## 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
—	<b>TOTAL</b>	<b>8/8</b>

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

The grade 5 *Ready Texas Mathematics* materials consistently guide the development of academic mathematical language through visuals, manipulatives, and structured language strategies.

Students build conceptual understanding using tools such as base-ten blocks, place-value disks, area models, and cubes to explore and apply terms such as *volume*, *dividend*, *quotient*, *tenths*, *hundredths*, and *thousandths*.

Lessons guide teachers to prompt mathematical conversations that reinforce vocabulary, such as identifying place value in decimals or describing geometric figures using terms such as *quadrilateral*, *congruent sides*, and *angle measure*. Visual and symbolic representations, including dot plots, scatter plots, and graphic organizers, support students in constructing and analyzing figures and data.

Mathematical discourse boxes, ELL supports, and hands-on activities (including tasks related to building three-dimensional figures or collecting and analyzing data in group investigations) provide opportunities for students to practice formal mathematical language in both written and oral contexts. Teacher instructions encourage educators and students to use complete academic sentences and apply appropriate terminology throughout instruction and student reflection.

### 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 grade 5 *Ready Texas Mathematics* materials include embedded educator guidance to scaffold, support, and extend students' use of academic vocabulary in context when communicating with peers and educators. In grade 5, students create a chart of words and phrases associated with operations to reinforce connections between symbols and mathematical language. In a measurement lesson, students build a table of equivalent lengths, engaging in teacher-led discussions to deepen their understanding of terms. Unit 3, Lesson 21 provides mathematical discourse prompts such as the following: "How does knowing the width of the prop area and dressing room area help you solve this problem?" Such prompts

scaffold students' vocabulary use when they discuss area and volume. In Lesson 17, students sort shapes using vocabulary cards with terms such as *rhombus* and *parallelogram*, explaining their reasoning in complete sentences.

Teacher guidance allows educators to support students, gradually release responsibility, and extend vocabulary use during partner interactions. The "Think-Share-Compare" routine engages students in discourse aligned with mathematical practices and supports vocabulary development. ELL Support boxes throughout the lessons provide scaffolds for unfamiliar terms and include teaching suggestions. For example, the ELL Support box in Lesson 25 explains stem-and-leaf terms, linking visual and conceptual understanding. Students engage in discourse while comparing decimals and breaking apart dividends. Students use terms such as *multiples* and *quotients* in teacher-facilitated discussions that reinforce vocabulary in context.

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

The grade 5 *Ready Texas Mathematics* materials include embedded guidance to support student application of appropriate mathematical language and academic vocabulary in discourse. The materials integrate "Mathematical Discourse" sections in every grade 5 lesson, which provide educator prompts and sample responses to support structured academic discussions. Students engage in discourse using precise vocabulary across various math concepts such as fraction operations, volume, and geometry. For example, in fraction lessons, students model problems on number lines and explain why a quotient is smaller than the dividend. Students use terms such as *quotient* and *unit fraction*. Lesson prompts such as "How did you decide to use multiplication to solve this problem?" encourage students to articulate their strategies using mathematical terminology.

ELL Support boxes guide teachers in reinforcing vocabulary, such as clarifying the term *unit* in context. In geometry and measurement lessons, students describe figures and volume using appropriate terms and justify their reasoning in peer conversations. Questions such as "How does the quotient compare to the dividend?" and "Does our answer make sense?" appear in every lesson. These questions appear during pair-share and whole-class discussion formats, which include embedded guidance to ensure that students consistently apply vocabulary.

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

The grade 5 *Ready Texas Mathematics* materials include embedded guidance to facilitate mathematical conversations, allowing students to hear, refine, and use math language with peers. Language routines such as "Think-Share-Compare" and "Mathematical Discourse" support academic conversations. In grade 5, the materials on volume prompt educators with questions such as, "If a figure has a volume of 12 cubic units, how many layers and how many cubes in each layer could it have?" and "If you know the number of

cubes in one layer of a solid figure, how could you find the volume by adding?" Such questions encourage students to articulate their reasoning, refine mathematical language, and collaborate with peers. Lesson 26 prompts students to describe data trends and compare scatterplots, supporting students' use and refinement of precise academic vocabulary during peer analysis.

A step-by-step guide in Lesson 22 directs teachers to organize students in pairs or groups. The guide also directs teachers to use "Mathematical Discourse" questions to support or extend students' thinking while monitoring group discussions. The materials include answers and key topics for teachers to listen for, fostering rich mathematical conversations that encourage students to hear, refine, and use math language with peers within collaborative structures.

**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 grade 5 *Ready Texas Mathematics* materials include embedded guidance to anticipate various student answers, including exemplary responses to questions and tasks as well as guidance to support or redirect inaccurate student responses. "Mathematical Discourse" sections in each lesson provide exemplary responses to teacher-guided questions. For example, in a lesson on volume, the teacher poses the following question: "If a figure has a volume of 12 cubic units, how many layers and how many cubes in each layer could it have?" The materials provide an example response indicating possible layer and cube combinations, such as one layer with 12 cubes, two layers with six cubes, or three layers with four cubes, illustrating correct reasoning.

"Assessment" and "Remediation" charts at the end of lessons include exemplary answers, common student errors, explanations for misconceptions, and specific remediation strategies.

Misconception alerts help educators anticipate errors, such as misunderstandings about payroll deductions. Such alerts guide teachers to clarify distinctions between taxes and other deductions (such as health insurance). Error Alert boxes identify frequent errors such as incorrect decimal placement. These boxes also explain how to use estimation to show unreasonable answers. Teacher guidance instructs educators on explaining why certain answer choices are incorrect. Such guidance supports educators in redirecting student thinking and reinforcing accurate mathematical reasoning.

## 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
—	<b>TOTAL</b>	4/4

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

The grade 5 *Ready Texas Mathematics* materials appropriately integrate TEKS process standards. Each grade 5 lesson embeds MPS tips that align with specific TEKS process standards such as 5.1A, 5.1B, 5.1C, 5.1D, 5.1F, and 5.1G. These tips offer educator guidance to deepen student understanding and support age-appropriate integration of strategic thinking, justification, and communication.

The *Teacher's Guide* includes prompts that direct students to apply strategies, explain reasoning, and evaluate the efficiency of methods. Lessons on volume, decimal operations, and personal finance include such prompts.

The materials emphasize real-world application through the "Real-World Connection" sections. In these sections, students brainstorm authentic scenarios (such as using volume in everyday contexts) and apply multistep problem-solving routines to analyze budgets and savings.

The "Answering the Demands of the TEKS" overview outlines a commitment to mathematical reasoning, higher-order thinking, and conceptual understanding. Lesson examples provide opportunities for students to use tools such as number lines and pictorial models to represent mathematical relationships and reflect on their thinking.

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

The grade 5 *Ready Texas Mathematics* materials meet the criteria for incorporating and connecting process standards throughout the learning pathways. The *Teacher's Guide* embeds MPS tips throughout each lesson, supporting teachers in reinforcing TEKS-aligned skills such as justifying solutions (5.1G), using representations (5.1F), and evaluating reasonableness (5.1B). In Lesson 27, students interpret data using bar graphs and dot plots while applying strategies that MPS tips help guide.

The front matter of the *Teacher's Guide* includes a chart that consistently integrates real-world contexts and multiple approaches to reinforce process standards. Learning pathways support students in developing procedural fluency and applying mathematical reasoning in new situations.

The *Implementation Guide* clarifies how modeled and guided instruction consistently integrates process standards. For example, in lessons on fraction multiplication, students develop critical thinking using visual models and engage in discourse and written explanations of fraction concepts. Lessons build cumulatively across units, connecting earlier place-value exploration in Unit 1 to later volume applications in Unit 3 through estimation (5.1C), justification (5.1G), and transfer of learning. The materials purposefully align MPS tips within the instructional sequence, such as examining decimal notation in Lesson 1 (5.1D).

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

The grade 5 *Ready Texas Mathematics* materials include an overview of the TEKS process standards incorporated into each lesson. Each lesson begins with a "TEKS Focus" resource in the *Teacher's Guide* that lists the relevant process standards, such as 5.1A, 5.1C, 5.1D, 5.1E, 5.1F, and 5.1G. This resource enables educators to quickly identify the specific process skills that the materials incorporate into instruction.

Lessons in the materials incorporate MPS tips, which explicitly guide how student activities address standards. In Lesson 1, an MPS tip aligned to Standard 5.1G prompts students to explain mathematical ideas using the least place value when reading decimals. In Lesson 18, Standard 5.1C and Standard 5.1F support students' development of problem-solving strategies and mathematical justification while working with volume and surface area. Lesson 20 engages students in multistep problem-solving using volume, supporting Standard 5.1F through teacher prompts that help students justify their reasoning. In a lesson on classifying two-dimensional figures, the materials address Standard 5.1E as students model the hierarchical relationship of triangles using diagrams. In Lesson 22, aligned with Standard 5.1E, students represent and connect ordered pairs in tables and graphs. Integrating TEKS process standards and point-of-use instructional supports ensures a consistent focus on reasoning.

## 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
—	<b>TOTAL</b>	9/9

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

The grade 5 *Ready Texas Mathematics* materials provide structured opportunities for students to think mathematically, persevere through solving problems, and make sense of mathematics. Lessons embed "Think-Pair-Share" routines and include open-ended questions, allowing students to engage in mathematical reasoning through partner discussions and multiple representations. In a lesson on dividing fractions, students solve a word problem in the "TEKS Practice" section by choosing and justifying a strategy, while teachers document the models and rationale. This work supports students' perseverance and conceptual understanding. Lessons such as "Understand Division with Unit Fractions" and "Divide Unit Fractions in Word Problems" prompt students to explain how visual models such as number lines support their understanding, reinforcing mathematical connections and sustained problem-solving.

The curriculum builds on students' prior knowledge and presents performance tasks that integrate multiple standards and encourage various solution paths. Tasks involving volume and frequency tables include discussion questions. These questions guide students to explore relationships between mathematical concepts and explain their thinking, supporting students' deep sense-making and mathematical reasoning.

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

The grade 5 *Ready Texas Mathematics* materials support students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks. Lessons engage students in exploring various methods (such as using pictorial models and number lines to solve fraction word problems), finding multiple factor combinations for numbers such as 36, and comparing strategies (such as using area models or partial products when multiplying decimals). The materials prompt students to explain their thinking with questions such as, "Why are there so many ways to make the



product 36?" and "How are the area models and partial products related?" These questions help students articulate multiple solution paths.

Instructional strategies, such as "Think-Pair-Compare" routines, guide students to analyze similarities and differences in their methods and discuss alternative approaches. The materials help students justify their strategies through tasks that require them to classify two-dimensional shapes in multiple ways and explain their rationale for each classification. Students also compare estimation strategies such as rounding and front-end estimation. These tasks encourage students' reflections on why different methods are valid.

### **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 grade 5 *Ready Texas Mathematics* materials are designed to require students to make sense of mathematics through multiple opportunities to do, write about, and discuss math with peers and educators. Students "do" math by building models to represent concepts with unit cubes (such as volume). Students also graph relationships between variables. Lessons consistently include structured peer interactions and whole-class discourse, including "Think-Share-Compare" and "Think-Pair-Compare" routines, in which students collaborate to solve problems and analyze strategies.

The materials consistently provide writing opportunities. For example, TEKS Practice pages prompt students to justify their thinking using mathematical vocabulary. Students explain concepts such as interpreting remainders, calculating deductions, or evaluating expressions with grouping symbols.

Instruction includes embedded discussion prompts, which guide students to explain their reasoning aloud. For example, students explain the role of remainders in division problems or interpret patterns in graphs. The materials thus intentionally support students in developing mathematical understanding through doing, discussing, and writing about math with others.

## 6.2 Facilitating Productive Struggle

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

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

The *Ready Texas Mathematics* materials support educators in guiding students to share and reflect on their problem-solving approaches by embedding prompts that elicit explanations, arguments, and justifications. Lessons on measurement conversions prompt educators to ask the following questions: "Would you prefer to solve this problem by converting centimeters to millimeters or millimeters to centimeters? Why? How would you describe comparing 5 feet to 62 inches?" These questions encourage students to share explanations and arguments. Students respond in writing to questions such as the following: "What is the product of  $0.6 \times 0.8$ ? Explain your answer." Such questions support written justifications. Lesson 13 guides educators to facilitate peer discourse in which students explain and justify fraction multiplication strategies. Students discuss how visual models connect to multiplication and compare fraction multiplication to whole number multiplication. Lesson 19 supports students' reflection on volume problem-solving with prompts such as the following: "Could you find volume using repeated addition? How could you find volume using multiplication? Are there other ways?" These prompts encourage justification and argumentation.

The *Teacher's Guide* includes prompts such as "Have students justify why polygon A can be called a quadrilateral, parallelogram, and rectangle" and "Ask students to explain why you multiply to convert yards to inches." These prompts encourage students to share and reflect. In Lesson 5, teachers prompt students to explain their estimation choices and preferred methods between rounding, mental math, and number lines.

"Think-Pair-Compare" routines guide students through making sense of problems, discussing, comparing strategies, and applying learning. In grade 5, students analyze the multiplication of fractions by whole numbers. The materials ask students the following questions: "What other models could you use? Which is most useful? Why? How did you decide to multiply?" These questions promote explanation, argumentation, and justification.

When representing categorical data on frequency tables and bar graphs, students discuss data types and alternative graphs by answering questions such as the following: "Could you use a dot plot? Explain your reasoning." Such questions support argumentation and justification. These supports consistently help educators guide students' sharing and reflection of explanations, arguments, and justifications in problem-solving.

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

The grade 5 *Ready Texas Mathematics* materials include prompts that support educators in providing explanatory feedback based on student responses and anticipated misconceptions. "Assessment" and "Remediation" charts at the end of each lesson guide teachers in identifying student responses and misconceptions. These charts include remediation strategy prompts. Lesson 16 includes embedded prompts that guide educators to ask follow-up questions about student reasoning when dividing unit fractions. For example, educators ask students questions about comparing pictures and models. Such questions help students clarify meaning, deepening their understanding.

"Error Alert" sections advise teachers to help students analyze patterns by examining relationships between variables, not just increments. The materials offer educators guidance during lessons involving stem-and-leaf plots. Such guidance reminds students about place value roles in the plot and addresses misconceptions when interpreting data. In lessons about net income, the materials prompt teachers to clarify the difference between gross and net income, alerting teachers that students may omit taxes when calculating payroll deductions. The materials offer strategies to correct these misunderstandings. These embedded prompts and guidance consistently support educators in providing explanatory feedback based on student responses and anticipated misconceptions.