Curriculum Associates, LLC

Supplemental English Mathematics, 4
Ready Texas Mathematics, Grade 4

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Supplemental	**9781728022307**	**Print**	**Static**

Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	28	0	Flags Not in Report	Not Applicable	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	17 out of 23	74%
2. Progress Monitoring	15 out of 20	75%
3. Supports for All Learners	32 out of 36	89%
4. Depth and Coherence of Key Concepts	16 out of 16	100%
5. Balance of Conceptual and Procedural Understanding	38 out of 38	100%
6. Productive Struggle	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, and 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
—	**TOTAL**	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.

Ready Texas Mathematics grade 4 materials include detailed alignment guides that address the Texas Essential Knowledge and Skills (TEKS) covered throughout the mathematical concepts within the curriculum. The TEKS alignment is clearly presented in a correlation guide that outlines how each standard is addressed within the instructional content. The *Teacher Guide* features a comprehensive scope and sequence that spans the entire school year, with each unit organized to reflect a logical progression of TEKS-aligned mathematical concepts.

The *Teacher Guide* offers a clearly structured scope and sequence for the full academic year. Each unit overview includes TEKS-aligned objectives and demonstrates a logical progression of content, such as beginning with place value and advancing through comparing, ordering, and understanding numbers, in preparation for more complex operations and number relationships.

Vertical alignment is evident through learning progression paths and in the unit overviews, which show how mathematical concepts build from prior grades and lay the foundation for future learning. This vertical alignment is further reinforced throughout each lesson, particularly in the "Guided Instruction" and "Scaffolded Questions" sections. Horizontal alignment within grade 4 is supported through consistent reinforcement of related skills across units, allowing students to deepen their understanding

within the same grade level. However, *Ready Texas Mathematics* for grade 4 did not receive full credit due to the absence of English Language Proficiency Standards (ELPS) in the materials.

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.

Ready Texas Mathematics grade 4 *Teacher Guide* includes a detailed implementation guide that supports effective educator use with clear unit overviews outlining key TEKS-aligned concepts, pacing suggestions, essential vocabulary, and prerequisite knowledge.

The materials provide usage recommendations for adapting instruction to meet diverse student needs across various contexts, including just-in-time supports, intervention activities, and challenge extensions. Each lesson offers Differentiated Instruction strategies with teaching tips, support for English Language Learners (ELLs), and opportunities for both on-level and advanced learning, ensuring educators can tailor instruction to a wide range of learners within the course.

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

Ready Texas Mathematics grade 4 materials include a *TEKS Correlation Guide* that maps each standard to specific lessons and activities, accompanied by depth of knowledge (DOK) levels to clarify the cognitive demand of instructional tasks. This guide effectively aligns the curriculum to grade-level TEKS standards.

The TEKS correlation charts are provided at the front "Overview" section of the *Teacher Edition* workbook and at the beginning of each unit, accompanied by sections outlining 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. Skill entry points are presented by grade level and TEKS rather than being tailored to individual student diagnostic performance, meaning that recommended skill entry points based on diagnostic assessment results are not provided.

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

Ready Texas Mathematics grade 4 materials include protocols and corresponding guidance to support unit internalization. For example, the *Teacher Guide* for Unit 1 provides a detailed overview outlining core mathematical concepts. Ready Central offers instructional planning documents, including a "Unit Preparation Template" and a "Lesson Prep Guide Graphic Organizer," which assist teachers in unpacking and internalizing unit and lesson content.

The materials include models, progressions, and teaching tips to help teachers internalize key objectives. Guidance for lesson internalization is found in the Concept Extension and Guided Instruction sections of lessons, which deepen student understanding and support application of learned concepts.

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

Ready Texas Mathematics grade 4 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 aimed at building teacher capacity and ensuring fidelity of use.

The Leadership Resources tab provides planning templates, pacing tools, and targeted questions for use during lesson planning sessions and classroom observations to promote consistent, high-quality instruction across classrooms. The online platform's Success Central hosts numerous articles that guide leaders on topics such as using the materials, facilitating the try-discuss-connect framework, pacing the year, and understanding lesson structures.

The materials also include an Online Teacher Toolbox with training videos, planning tools, implementation tips, and discourse supports. Instructional leaders are supported with guidance on implementing the Think-Share-Compare routine to help build effective classroom teaching routines.

1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	The materials do not include ELPS guides for educators that are required by the rubric.	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.

Ready Texas Mathematics grade 4 *Teacher Edition* provides detailed, structured lesson plans for each day with clearly defined TEKS-aligned learning objectives, organized lesson components (including Model It, Guided Practice, and Independent Practice), and suggested time frames to support instructional pacing.

Teacher materials include guidance on when and how to use student materials, and checks for understanding are embedded to promote academic language and discourse through various group formats. The materials do not feature detailed *Pacing Guides* and lesson components, as well as assessments that correlate to 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).

Ready Texas Mathematics grade 4 materials provide Spanish versions of the *Student Workbook*, giving Spanish-speaking students access to lesson content and practice. However, the static materials do not include family-facing resources in either Spanish or English for each unit, such as guardian letters, unit summaries, home activities, or suggestions for supporting student learning at home.

There is no 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
—	**TOTAL**	8/12

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

Ready Texas Mathematics grade 4 materials meet the criteria by clearly including both the definition and intended purpose for the types of instructional assessments. The *Teacher Edition* defines assessment types such as TEKS Practice and Differentiated Instruction, explaining that they integrate and extend mathematical concepts and provide structured opportunities for evaluating student understanding.

Materials consistently embed formative assessments with stated purposes, such as identifying misconceptions and guiding small-group instruction or reteaching. For example, "TEKS Practice: At a Glance" sections clarify the assessment purpose by aligning tasks to test-like expectations, while Differentiated Instruction pages provide sample student questions, expected responses, and error-specific remediation guidance.

The Think-Share-Compare routine is defined with explanations of when and why to use it, reinforcing its instructional role in ongoing assessment and student learning.

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

Ready Texas Mathematics grade 4 materials meet the criteria by providing guidance to ensure 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 Guide* specifies a recommended 60-minute structure for guided and independent practice, and the "TEKS Practice" section includes item-specific DOK levels and instructional notes in the "At a Glance" section. Answer keys include rationales and sample solutions to support accurate scoring.

The "Differentiated Instruction" section offers error analysis charts with remediation strategies, reinforcing 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.

Ready Texas Mathematics grade 4 materials do not meet the criteria for digital assessments with accommodations. Digital assessments are not part of the Ready Mathematics curriculum. The materials allow practice assessments to be uploaded to Google Classroom, but accommodations cannot be assigned.

Printable assessment resources are available, including "Lesson Practice" sections and unit assessments in print, accessible via online PDFs. *Ready Texas Mathematics* is a static, print-based program, and does not include digital assessments with customizable accommodations.

Materials do not provide features such as text-to-speech, toggleable content or language supports, or embedded calculators. Students can access all pages through Google Classroom, which contains a selection button for text-to-speech, but this feature is part of the platform, not the materials themselves.

The *Teacher Edition* offers guidance for accommodating students on printed assessments. The online portion includes assessments, but details about accommodations within these assessments cannot be quantified.

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

Materials do not meet the criteria for diagnostic assessments with TEKS-aligned tasks or questions. 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.

Ready Texas Mathematics grade 4 materials meet all criteria for including a variety of formative assessments with TEKS-aligned tasks or questions. The "TEKS Practice" sections in each lesson provide tasks with varying levels of complexity, including DOK 1 to DOK 3. For example, in grade 4, Unit 3, Lesson

16, items range from multiple-choice questions on decimal comparison (DOK 1) to open-ended questions that require explanation and justification using number lines (DOK 2–3).

Each lesson integrates formative assessment tools aligned with the TEKS through Guided Instruction, Differentiated Instruction Assessment and Remediation, and end-of-unit TEKS Practice.

The materials include interactive item types in the provided formative assessments. Each assessment contains two or more interactive item type questions. For example, grade 4, Lesson 26 contains a variety of question types as well. For example, it contains multiple-choice, multi-select, fill-in-the-blank, 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.

Materials meet the criteria for including scoring information and guidance for interpreting student performance and for providing a rationale for each correct response. The *Teacher Guide* includes detailed solutions with explanations and DOK levels for TEKS Practice items, as well as rubrics for evaluating student performance on open-ended tasks. For example, in grade 4, Lesson 18, TEKS Practice Question 4 explains the correct answer using compatible numbers and assigns a DOK level to support teacher interpretation of mastery.

Materials also include rubrics for performance tasks and remediation tables that align common errors with student misconceptions and recommended instructional responses. Rationales for each correct and incorrect response are provided, and often model how students should approach solving the problem.

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

Materials meet the criteria through the "Assessment and Remediation" section found at the end of each lesson that provides teachers with a closure question, followed by a chart outlining common student errors, rationales for those errors, and corresponding remediation suggestions to address them.

Students demonstrating proficiency are provided a Challenge Activity to extend learning. The "Facilitating Small Group Instruction" resource in the Teacher Toolbox guides teachers to review multiple sources of assessment data, including prerequisite reports, lesson quizzes, unit assessments, Quick Checks, and student work to identify learning gaps and adjust instruction.

Instructional resources aligned with identified needs include Modeled and Guided Instruction for reteaching, Tools for Instruction for prerequisite skill gaps, Math Center Activities for practice, unit games for collaborative learning, and Hands-On and Challenge Activities.

In-lesson supports such as Error Alerts, Concept Extensions, Visual Models, and ELL Support offer additional scaffolds, while Teacher Tools on the online platform provide access to fluency practice, reteach lessons, tutorial videos, and enrichment activities, all intended to help teachers tailor instruction to student performance trends.

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

With the addition of a *Ready Texas Mathematics* grade 4 Unit Self-check Chart, students will be able to track and monitor learning progress throughout each unit.

Students can use *Daily Learning Reflection* guides to record learning acquired and questions. Materials also encourage teachers to have students self-monitor their learning throughout the unit.

Teachers are guided through the "Facilitating Small Group Instruction" resource to use data from prerequisite reports, informal observations, Quick Checks, Think-Pair-Compare routines, and student work to monitor progress and form small groups. These data points support evaluating mastery and instructional decisions.

Formative assessments, Solutions and Explanations with Error Alerts, and Assessment and Remediation charts offer ongoing opportunities to assess 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.

Materials meet the criteria by providing prompts that support educators in conducting frequent checks for understanding at key points throughout each lesson or activity, along with detailed guidance for implementing these checks. The *Teacher Edition* includes step-by-step instructions with embedded questions such as those found in the Mathematical Discourse boxes and margin notes that encourage teachers to pause and ask students to explain their thinking. For example, grade 4, Lesson 25 directs teachers to have volunteers explain how to use a protractor and asks students to develop rules for measuring angles, supported by discourse questions addressing common misconceptions. Each lesson contains discussion topics, real-world connection questions, concept extension questions, and a progression of practice problems (modeled, guided, then independent) with guiding questions for teachers to monitor comprehension. The *Teacher Guide* provides strategies to respond to student struggles, including reteaching prerequisite skills, using manipulatives, and offering additional practice or challenge activities.

The Teacher Toolbox supports educators with resources for small-group instruction and differentiated interventions targeting learning gaps. Try It Solutions include Error Alerts that guide teachers in

identifying and addressing student errors, ensuring ongoing formative assessment throughout the lesson.

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
—	**TOTAL**	9/9

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

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

The *Teacher Edition* features Differentiated Instruction pages and Intervention Activities within each lesson that provide targeted strategies, hands-on tools such as coins and base-ten blocks, and Visual Models to build conceptual understanding. The Teacher Toolbox includes Facilitating Small Group Instruction and Tools for Instruction, which outline student grouping based on assessment data and offer skill-specific scaffolding strategies to support ongoing learning.

The online prerequisite report identifies specific prerequisite topics aligned to each lesson. Prerequisite Ready Lessons offer clearly defined learning progressions, educator prompts, problem examples, and discussion questions that help bridge foundational gaps, with aligned prior grade-level content such as grade 3 lessons supporting grade 4 concepts like estimation and problem-solving. Misconception Alerts and embedded remediation charts within lessons equip teachers to address common student errors and adjust instruction 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.

Materials include embedded supports for developing academic vocabulary and for clarifying unfamiliar references in text, meeting the criteria for embedded language supports.

Across multiple lessons, embedded supports appear in the form of point-of-use ELL Support boxes that guide teachers in using visuals, rephrased definitions, and structured sentence frames to help students understand and use academic language in context. For example, in grade 4, Lesson 13, terms like *numerator*, *denominator*, and *mixed number* are defined using student-friendly language, and in Lesson 22, teachers are prompted to connect the word *ray* to Visual Models. In Lesson 30, the ELL Support box helps clarify the phrase *most common* with examples from the data. Additionally, in Lesson 15, support is provided for explaining the meaning of *decimal* using the prefix *deci-* to make a linguistic connection to base-ten understanding.

Vocabulary terms are introduced at the beginning of each lesson, and the materials provide explicit (direct) 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.

Materials include explicit (direct) educator guidance for enrichment activities for students who have demonstrated proficiency in both grade-level and above-grade-level content and skills, as well as for extension activities targeting these proficiency levels. Each lesson features a Challenge Activity designed to deepen understanding and provide rigorous tasks; for example, students write word problems comparing decimals without using comparative language, fostering creative problem construction.

Differentiated Instruction pages after each lesson include explicit directions for implementing Challenge Activities that encourage extended reasoning and creative problem-solving beyond core content.

Enrichment activities synthesize content and promote continuous challenge, such as the Packing Boxes activity in grade 4, where students determine how many boxes are needed for a canned soup drive by analyzing different box sizes.

Mathematical Discourse prompts and "Extend the Math" questions embedded in lessons provide informal extension opportunities, such as justifying multiplication strategies and comparing alternative approaches in Lesson 6: "Multiply by Two-Digit Numbers," supporting flexible thinking and deeper application. In Unit 2, Lesson 10, students use number lines to decompose fractions greater than one, while Unit 3, Lesson 15 challenges students to read, write, and model equivalent mixed numbers and

decimals greater than one. These structured enrichment and extension supports offer explicit guidance for educators to engage students demonstrating proficiency at and beyond grade level.

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.

Ready Texas Mathematics for Grade 1 does not provide digital materials that 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 a digital component for teachers, called the Online Teacher Toolbox. 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.

Materials provide explicit (direct) educator guidance that offers multiple options and supports for students to demonstrate their understanding of mathematical concepts in various ways, including performing, expressing, and representing. Lessons include step-by-step instructions guiding hands-on activities such as using coins for adding and subtracting decimals or geoboards for exploring geometric figures.

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

Differentiated Instruction pages and the Assessment segment provides further guidance using tools like graph paper and structured prompts, supporting students' ability to express understanding through drawing, modeling, and oral or written explanation. Point-of-use Visual Model and Hands-On Activity boxes appear throughout lessons, enabling students to show their knowledge through concrete representations, partner discussions, and interactive tasks.

The Teacher Toolbox further supports diverse modalities with tutorials, small-group activities, and student-led centers. Overall, the materials integrate multiple strategies including real-world connections and process standards tips to ensure students can effectively perform, express, and represent mathematical understanding.

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.

Ready Texas Mathematics grade 4 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. Lessons begin with step-by-step teacher guidance and prompts such as, "Use the math you already know to solve the problem" or "Remind students that subtracting fractions is like subtracting whole numbers," which support activation of prior knowledge.

Materials anchor big ideas by using consistent visual and symbolic models to build conceptual understanding across lessons, such as the use of place-value charts, base-ten blocks, clocks, and fraction strips, to illustrate fundamental concepts. Students engage with math through multiple representations in Explore It, Model It, and Connect It, which transition from pictorial and Visual Models to symbolic forms. Tasks highlight key patterns and relationships, such as composing and decomposing mixed numbers using clocks and number lines, or analyzing rounding patterns in estimation tasks using roof-shaped models. The materials prompt discourse and reflection with questions like, "How is rounding to the nearest thousand like rounding to the nearest ten or hundred?" and "When describing a shape to a friend, what are some important details you need to include?", which help students and teachers connect essential features and relationships in mathematical concepts.

Educators are guided to connect prior learning with current objectives in the "Learning Progression" section of the *Teacher Guide* and by organizing content by Performance Categories.

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

Ready Texas Mathematics grade 4 materials meet the criteria for static materials by including educator guidance for effective lesson delivery and facilitation using various instructional approaches, including

more than two methods. Materials provide structured support such as step-by-step instructions for lesson components like introduction, modeled instruction, guided instruction, and independent practice.

The *Teacher Edition* includes tools like the Lesson Overview, Lesson Structure, and pacing tips, with embedded prompts for mathematical discourse, visual modeling, exploratory activities, and real-world connections. Lessons guide teachers to use visual aids (e.g., number lines and drawings), physical movement to explore geometric concepts, hands-on materials, partner talk, and scaffolded questioning. Differentiated activities, such as remediation, challenge tasks, and enrichment, extend instruction to address diverse learner needs.

The Teacher Toolbox offers resources including online tutorials, fluency practice, reteach lessons, teacher-led small-group instruction, and student-led centers, fulfilling the requirement for guidance using more than two instructional approaches.

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

Ready Texas Mathematics grade 4 materials include multi-tiered intervention methods for various types of practice and instructional structures with educator guidance for effective implementation. Each lesson contains a "Differentiated Instruction" section offering Assessment and Remediation activities, hands-on activities, and Challenge Activities. These support guided, independent, and collaborative practice across whole-group and small-group settings.

Grade 4 lessons feature three tiers (Intervention, On-Level, and Challenge Activities) labeled for individual, partner, or small-group use. The *Teacher Edition* includes prompts for addressing common errors and embedded supports like ELL and Misconception Alerts to guide interventions. Materials provide multi-tiered interventions through modeled, guided, and independent instruction, including reteach lessons and enrichment activities.

The Ready Central online platform offers teachers training videos, planning tools, and implementation guidance for these interventions. Small-group instruction guidance helps teachers analyze data, form groups, organize materials, set routines, and manage transitions. The materials provide resources linking intervention methods to different practice types and instructional structures, ensuring effective use of multi-tiered interventions.

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

Ready Texas Mathematics grade 4 materials include enrichment and extension methods that support various forms of student engagement through hands-on activities, creative problem-solving, and real-world application tasks. Challenge Activities on the Differentiated Instruction page encourage deeper-

level reasoning, collaboration, and critical thinking, such as designing quilt patterns with geometric concepts or explaining number patterns in novel contexts.

Materials provide educator guidance for effective implementation by specifying group size (individual or pairs), suggested materials, and prompting questions to facilitate mathematical discourse and reasoning. Step-by-step instructions guide teachers to scaffold student understanding and extend learning, supporting meaningful differentiation that meets diverse learner needs and fosters advanced conceptual exploration.

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

Ready Texas Mathematics grade 4 materials include prompts that support educators in providing timely feedback during lesson delivery. The *Teacher Edition* incorporates questions within "Guided Practice" and "Mathematical Discourse" sections to help teachers assess student understanding and offer immediate feedback, such as asking how a place-value chart aids in writing decimals in expanded form or prompting explanations for problem-solving strategies.

Misconception Alerts and Error Alerts appear throughout lessons to guide educators in identifying common student errors and addressing misconceptions with corrective strategies.

Lessons provide step-by-step instructions for circulating and monitoring student work, reinforced by Mathematical Process Standard (MPS) Tips that highlight specific moments to provide formative feedback. These features collectively provide comprehensive guidance for educators to deliver timely, effective feedback during 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
—	**TOTAL**	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.

Ready Texas Mathematics grade 4 materials include educator guidance on incorporating linguistic accommodations aligned with at least one level of language proficiency, as defined by the ELPS.

ELL Support callouts embedded in the *Teacher Edition* offer instructional suggestions such as using Visual Models, realia, word walls, and clarifying multiple-meaning words to scaffold student understanding of mathematical language. For example, a lesson on perimeter and area suggests posting key terms like *length*, *width*, *perimeter*, and *area* for ongoing reference, and another lesson prompts teachers to clarify distinctions between common and mathematical uses of terms such as *measuring cup* or *number patterns*. Supports help teachers scaffold content through visual and contextual cues. However, the materials do not provide accommodations differentiated across multiple levels of language proficiency; there are no distinct supports for beginning, intermediate, advanced, or advanced-high ELPS levels.

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.

Materials do not include implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL programs. Reviewers consistently found that while *Ready Texas Mathematics* contains embedded supports for English Learners, such as ELL callouts, suggested activities, vocabulary scaffolds, and strategies to promote academic discourse, these supports are universal in nature and not tailored to the specific needs of emergent bilingual students or the structures of Texas-approved bilingual/ESL program models.

Materials do not reference dual language, transitional bilingual, or content-based ESL methodologies and lack specific implementation guidance aligned to these frameworks. There is no section in the *Teacher Edition* or Teacher Toolbox providing planning strategies, classroom structures, or instructional routines for bilingual/ESL program settings. Although the materials include an ELPS Alignment document and address the ELPS through embedded supports, they do not meet the criteria 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.

Materials include embedded guidance for teachers to support emergent bilingual students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through oral and written discourse. Students engage in structured oral discourse using academic vocabulary to discuss and explain mathematical concepts, such as in lessons where they describe estimation strategies or distinguish between types of angles using precise terms. Teachers are guided to model language structures and use prompts to help students justify reasoning and compare solution paths.

The *Teacher Edition* includes routines like Three Reads, Co-Craft Questions, Notice and Wonder, Say It Another Way, Collect and Display, and Compare and Connect, all of which scaffold oral discourse and deepen understanding. Talk About It and Pair/Share prompts promote regular verbal exchange in a variety of settings.

Written discourse is supported through opportunities for students to create written explanations, reflect on strategies, and write notes or directions using visual aids and sentence stems. Lessons include explicit guidance to introduce new vocabulary using visuals and student-friendly definitions, and leverage home language knowledge through identification of cognates and contrasting everyday versus academic language. These strategies are consistently embedded in the materials to support emergent bilingual students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through both oral and written discourse.

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.

Ready Texas Mathematics grade 4 materials meet expectations for providing practice opportunities and instructional assessments throughout learning pathways that require students to demonstrate depth of understanding aligned to the TEKS. Lessons include scaffolded tasks such as estimating sums, using Visual Models (e.g., number lines, fraction models, base-ten blocks), solving real-world word problems, and engaging in mathematical discourse. Concept Extensions and Differentiated Instruction activities offer additional opportunities for students to demonstrate deep understanding through problem-solving, modeling, and explanation.

Instructional assessments, such as those embedded in the "TEKS Practice" sections, increase in rigor and vary in DOK levels, requiring students to apply conceptual understanding, interpret data, and justify reasoning. These intentional design features support the development of both procedural fluency and conceptual mastery aligned to 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.

Ready Texas Mathematics grade 4 materials meet all aspects of the criteria by providing questions and tasks, including enrichment and extension materials, that increase in rigor and complexity, leading to both grade-level and above-grade-level proficiency in the mathematics TEKS. The learning pathway supports a clear progression where students move from foundational conceptual understanding, such as comparing and ordering decimals using symbols, to more complex tasks, including writing word problems comparing decimals in contextual language (e.g., faster/slower, heavier/lighter).

Lessons incorporate scaffolded tasks that begin with hands-on models and visual representations, then transition to abstract practice, including one- and two-step word problems aligned to the TEKS.

Enrichment activities and Challenge Tasks are embedded within most lessons, encouraging students to apply learning in real-world and open-ended contexts, justify their reasoning, and explore multiple-solution strategies. For example, a Challenge Activity in Lesson 22 engages students in drawing and rationalizing a road map based on geometric constraints, moving beyond simple identification to creative application of lines and angles.

Hands-on activities paired with MPS Tips increase rigor by having students compare fractions from same-size wholes and apply equivalent-fraction knowledge to solve problems. These structured opportunities ensure students develop both grade-level mastery and extend their proficiency beyond grade-level expectations.

4.2 Coherence of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.2a	All criteria for guidance met.	1/1
4.2b	All criteria for guidance met.	1/1
4.2c	All criteria for guidance met.	4/4
—	**TOTAL**	6/6

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

Materials demonstrate coherence across concepts horizontally within the grade level by connecting patterns, big ideas, and relationships. Each grade 4 unit begins with the "Lesson Objectives and Prerequisite Skills" section that establishes connections between current and prior learning. Unit overviews and embedded lesson prompts support the development of conceptual understanding by linking related ideas, including the use of equivalent fractions as a foundation for comparing, adding, and subtracting fractions. Interactive tasks require correct responses and include explanations that reinforce how repeated addition relates to perimeter and area, as well as how area models support the representation of multiplication in expressions.

Learning Progressions in the *Teacher Guide* clearly show how lessons build on one another, such as in Unit 2, where students move from understanding equivalent fractions to adding and subtracting mixed numbers.

Real-World Connection boxes and teacher prompts guide students to make sense of relationships across mathematical ideas and to articulate how patterns emerge within and across concepts such as fractions, decimals, and multiplication.

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

Materials demonstrate coherence vertically across concepts and grade bands, including connections from grade K–6, by connecting patterns, big ideas, and relationships. The Learning Progression appears at the beginning of each lesson, showing how content builds on previous grades and leads to future learning. For example, in Lesson 17, students build on grade 2 and grade 3 work with whole-number addition to add and subtract decimals in grade 4, preparing for decimal multiplication and division in grade 5. Lesson 4 describes how strategies developed in grade 3 support the standard algorithm in grade 4 and extend to rational number operations in grade 5. Lesson 13 connects unit fractions from grade 3 to benchmark fraction comparisons in grade 4 and emphasizes that these skills are foundational for algebra.

"Explore" activities prompt students to apply strategies and models from earlier grades, reinforcing vertical alignment and helping learners construct meaning through connections across grade levels.

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.

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 includes a Learning Progression that identifies prior grade-level knowledge, the current lesson focus, and how it supports future learning.

Lessons build on procedural understanding, such as applying strategies for multi-digit addition and subtraction to multiplication in grade 4, with increasing complexity in grade 5 involving decimals and multi-step problems. Additional coherence is provided by MPS Tip boxes and visual aids, including flowcharts that clearly identify how each unit connects to prior instruction and upcoming concepts. Students revisit perimeter concepts from earlier grades to solve real-world problems involving missing side lengths, supporting their procedural fluency and understanding of formulas.

Concepts are extended through activities such as Explore It and Concept Extension, which encourage students to activate prior understanding while building toward more complex applications. For example, students use knowledge of fraction models from grade 3 to develop equivalence and operations with fractions in grade 4, which prepares them for adding and subtracting fractions with unlike denominators in grade 5.

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.

Materials provide spaced retrieval opportunities with previously learned skills and concepts across learning pathways by incorporating review tasks, spiraled lesson structures, and cumulative assessments that reinforce prior knowledge over time. Unit Practice worksheets include items aligned to lessons throughout the unit, such as Unit 1 Practice combining place value, rounding, and all four operations, and Unit 4 Practice drawing from Lessons 18–21.

Lesson introductions and interactive activities prompt students to retrieve prior concepts and skills, including classifying angles before identifying triangles and using knowledge of fractions to support understanding of decimals. Visual Models like arrays are revisited across grades to support problem-solving strategies.

The *Teacher Guide* outlines learning progressions and prerequisite skills in the unit overview, ensuring that both previously learned skills and concepts are intentionally revisited across the learning pathways to build fluency and deepen understanding.

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

Materials provide interleaved practice opportunities with previously learned skills and concepts across learning pathways by embedding tasks and questions that require students to apply prior knowledge in new contexts. In grade 4, the Think-Share-Compare and Explore It components encourage students to connect foundational skills, such as using whole-number operations, to new concepts like adding and subtracting fractions.

Independent and TEKS Practice problem sets mix operations and concepts within a single set, requiring students to draw from skills in addition, subtraction, multiplication, and division. Lessons interleave procedural and conceptual understanding, as seen in the use of area models and place-value strategies in solving multiplication and real-world perimeter and area problems. Lessons build on each other within learning progressions, such as using strategies from Lesson 8: "Understand Equivalent Fractions" to support learning in Lesson 9: "Compare Fractions," ensuring continuous practice and reinforcement across pathways.

Instructional materials present scaffolded questions that integrate multiple strands, such as measurement and operations, prompting students to apply knowledge of unit conversions using multiplication and division.

5. Balance of Conceptual and Procedural Understanding

Materials are designed to balance conceptual understanding, procedural skills, and fluency.

5.1 Development of Conceptual Understanding

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.1a	All criteria for guidance met.	3/3
5.1b	All criteria for guidance met.	2/2
5.1c	All criteria for guidance met.	1/1
—	**TOTAL**	6/6

5.1a – Questions and tasks provide opportunities for students to interpret, analyze, and evaluate models and representations for mathematical concepts and situations.

Materials meet the criteria by providing questions and tasks that require students to interpret, analyze, and evaluate models and representations for mathematical concepts and situations. Students interpret visual representations, such as dot plots and arrays, to extract and explain data, as seen in lessons involving tree-height comparisons and sticker arrays.

Materials guide students to analyze area models and base-ten blocks to explain mathematical relationships, such as how a model represents the distributive property or accurately depicts partial products.

Students evaluate quadrilateral diagrams using Venn diagrams to classify figures based on side and angle properties, requiring justification of their evaluations. In Lesson 30, students analyze a frequency table and dot plot by discussing how data is arranged and converted.

In Teacher Toolbox Lesson 21, students construct shapes using tiles, trace perimeters, and compare area and perimeter to deepen understanding through evaluation of shape properties. Lesson 10 tasks students with arranging waffle pieces into fractions, analyzing the decomposition of fractions greater than one, and evaluating different representations of equivalent-fractional values. Students connect mathematical models to real-world contexts, such as interpreting decimal representations in money, food labels, and temperatures, further reinforcing opportunities to interpret, analyze, and evaluate mathematical models in meaningful situations.

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

Materials meet the criteria by including questions and tasks that require students to create concrete models and pictorial representations of mathematical situations. Students use fraction strips to model addition and subtraction of fractions with like denominators in Lesson 11, and create visual representations using area models and the lattice method to solve two-digit multiplication problems in

Lesson 6. In Lesson 16, students draw number lines labeled by hundredths to compare decimals and use cardboard tubes colored to represent water quantities in a real-world context, supporting the construction of both pictorial and physical representations.

Additional tasks have students build arrays with counters, draw perfect square models, and use base-ten blocks to represent place value in Lesson 1. Students also construct a collage using only parallel and perpendicular lines and use a protractor to draw angle representations, both of which require hands-on creation and visual modeling.

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

Materials meet the criterion by providing consistent opportunities for students to apply conceptual understanding to new problem situations and contexts. Lesson 7 prompts students to solve real-world division problems by determining group size or quantity per group, reinforcing understanding through applied scenarios. Lesson 33 tasks students with calculating profit by subtracting expenses from income in business-related problems, encouraging the use of operations within financial contexts. Lesson 6 includes a Hands-on Activity where students use play money to model multiplication of two-digit numbers, transferring numerical concepts to simulated transactions. Lessons 16 and 17 guide students in applying their understanding of decimals by comparing and ordering decimal values and exploring how decimal operations relate to sports measurements like the long jump.

Additional tasks, such as brainstorming real-world uses for adding and subtracting fractions in contexts like cooking or construction, and rewriting fractional expressions using properties of operations, further support the application of conceptual understanding in novel and relevant situations.

5.2 Development of Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.2a	All criteria for guidance met.	2/2
5.2b	All criteria for guidance met.	3/3
5.2c	All criteria for guidance met.	3/3
5.2d	All criteria for guidance met.	1/1
—	**TOTAL**	9/9

5.2a – Materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level mathematical tasks.

Ready Texas Mathematics grade 4 materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level mathematical tasks. Lessons emphasize structured practice with operations such as multiplication and estimation, allowing students to develop efficiency and recall of core computation strategies. In Unit 1, Lesson 5 and Lesson 6, students engage with area models, partial products, and lattice multiplication, progressing toward the standard algorithm through scaffolded and repetitive practice that strengthens procedural fluency.

Materials include drills and interactive tutorials in the Teacher Toolbox, where students receive corrective feedback that supports automaticity. Lesson activities such as using number lines to round and estimate sums, and solving multi-step problems with estimation strategies, further support the development of automatic recall and computational fluency aligned with grade-level expectations.

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

Ready Texas Mathematics grade 4 materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures throughout learning pathways. Lessons engage students in solving problems using a range of strategies, including area models, partial products, and standard algorithms, as seen in Lesson 6: "Multiply by Two-Digit Numbers" and Lesson 7: "Divide Whole Numbers." Students are prompted to select and compare methods, supporting procedural flexibility and efficiency. In fraction-focused lessons, such as Lesson 8: "Understand Equivalent Fractions," and activities involving decomposing fractions greater than one, students explore multiple representations, justify their thinking, and describe alternative solutions.

"Mathematical Discourse" sections prompt students to explain reasoning and evaluate different methods, reinforcing accurate procedures. Guided Practice consistently supports the application of all three procedural qualities by having students work through problems, model mathematical relationships, and connect concepts to real-world contexts through structured peer and class discussions.

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

Ready Texas Mathematics grade 4 materials provide opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy throughout learning pathways. Lessons include structured comparisons of multiple strategies, such as using area models, partial products, and the lattice method for multiplication in Lesson 6, where students reflect on which strategy was easiest or most efficient. In Lesson 17, students solve decimal operations with place-value charts and number lines and then evaluate which representation provided the most accurate understanding of the problem.

Materials promote strategic reflection through teacher prompts that ask students to justify their methods and compare outcomes, supporting evaluation for flexibility and precision. The Think-Pair-Compare routine consistently reinforces evaluation skills through six phases, including Solve and Support Your Thinking, Compare, and Connect and Reflect, enabling students to assess methods across all tasks.

Interactive Tutorials and TEKS Practice offer multiple opportunities to examine different approaches, such as comparing fractions using common denominators or benchmarks, prompting students to consider which strategies are most effective, and why.

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

Ready Texas Mathematics grade 4 materials contain guidance to support students in selecting increasingly efficient approaches to solve mathematics problems. Students solve addition and subtraction problems with mixed numbers and engage in mathematical discourse prompted by the educator to discuss which method is most efficient, and why.

When finding perimeter and area of rectangles, students explore multiple methods and consider situations where one approach might be preferable, guided by prompts such as, "What is the method that you prefer?" and "Are there situations when one method would be better than the other?" Lesson 6 guides students through multiplication strategies including arrays, area models, and partial products before introducing the standard algorithm, with teacher prompts encouraging reflection on the efficiency of each method. In Lesson 12, students use number lines, Visual Models, and equations for fraction addition and subtraction, with prompts like, "What is another way you could solve this problem?", encouraging movement toward more efficient mental math or algorithmic approaches. Each lesson leads students through multiple approaches, encouraging strategic thinking and evaluation of answer reasonableness.

Interactive Tutorials in the Teacher Toolbox reinforce this guidance by allowing students to practice and compare strategies for multiplication by one-digit numbers and for comparing fractions using common denominators, enabling students to discover the most efficient methods for themselves.

5.3 Balance of Conceptual Understanding and Procedural Fluency

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

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

Materials explicitly (directly) state how both the conceptual and procedural emphasis of the TEKS are addressed. Lessons incorporate conceptual emphasis through the use of models, manipulatives, visual representations, and place-value charts that support students in building deep understanding of mathematical ideas such as area, perimeter, volume, multi-digit operations, and fractions.

Students engage in activities like using color-coded beads and area models to visualize mathematical concepts, developing reasoning about place value, distributive property, and equivalent fractions. The materials include procedural emphasis by guiding students to apply standard algorithms and formulas with structured practice and pacing. The teacher guidance highlights the transition from conceptual models to procedural methods, aligning with the TEKS expectations for developing accuracy and fluency.

The Implementation Guide affirms that lessons integrate conceptual understanding and procedural fluency through active problem-solving, questioning, and mathematical discourse, ensuring students learn how and why strategies work and when to apply them.

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

Materials meet all components of the TEKS-aligned criterion by offering questions and tasks that provide opportunities for students to use concrete models, pictorial representations, and abstract models. Lessons consistently begin with hands-on activities, such as using place-value blocks, rods, and flats, to model decimals or cardboard tubes to compare decimal values, aligning with TEKS 4.2.F. Students use physical protractors and manipulatives to measure and construct angles, and materials include teacher-guided strategies for engaging with tangible angle models.

Pictorial representations are integrated throughout lessons with Visual Models like decimal area charts, place-value diagrams, classification charts, and number lines to support conceptual understanding.

Abstract reasoning is developed in later portions of each lesson through symbolic equations, comparison of numerical values without models, and algebraic expressions using rational numbers. Sections like "Hands-On Activities," "Model It," and "TEKS Practice" structure the learning progression from concrete to

pictorial to abstract, demonstrating how the materials fulfill the requirement for all three representational levels as outlined in the TEKS.

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.

Materials fully support students in connecting, creating, defining, and explaining both concrete and representational models to abstract (symbolic, numeric, or algorithmic) concepts as required by the TEKS. Students use geoboards to create lines of symmetry, then identify and explain lines of symmetry in classroom objects, linking physical models to abstract geometric ideas.

Ready Texas Mathematics incorporates the Think-Share-Pair routine, guiding students through a six-step progression from concrete to abstract, providing teachers with clear, TEKS-aligned examples. In lessons such as Convert Measurements, students employ measuring tools and physical containers to build understanding of capacity before writing symbolic conversions like 4 cups = one quart. Area models break apart two-digit numbers in multiplication lessons, connecting to the standard algorithm. Number lines and bar models support exploration of improper fractions and mixed numbers.

Students routinely define and explain how their models represent mathematical concepts; for instance, in measuring angles with protractors, students describe angle sizes based on their measurements, and in data representation lessons, students interpret bar graphs and pictographs by explaining how graph features represent quantities.

The *Teacher Guide* consistently offers hands-on activities and Visual Supports that broaden students' understanding by connecting pictorial models to symbolic representations. Students engage in discussions about methods to find perimeter and analyze lines of symmetry through cutting and folding polygons, which supports their ability to explain how models relate to abstract concepts. The Implementation Guide affirms that students create mathematical models using pictures, diagrams, tables, or equations in every lesson to solve problems, ensuring comprehensive support for moving from concrete and representational experiences to abstract mathematical understanding.

5.4 Development of Academic Mathematical Language

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.4a	All criteria for guidance met.	1/1
5.4b	All criteria for guidance met.	2/2
5.4c	All criteria for guidance met.	1/1
5.4d	All criteria for guidance met.	2/2
5.4e	All criteria for guidance met.	2/2
—	**TOTAL**	8/8

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

Ready Texas Mathematics grade 4 materials meet all criteria by providing consistent and structured opportunities for students to develop academic mathematical language using visuals, manipulatives, and language development strategies, as described in the criteria.

Students engage with academic terms such as *protractor*, *degree*, *dot plot*, *frequency table*, and *data* through activities that involve measuring classroom objects and plotting data with stickers on number lines.

Visual supports like diagrams, place-value charts, and models, including base-ten blocks, strips of paper, money, and model clocks, reinforce understanding of terms such as *digit*, *expanded form*, *decimal fractions*, and *elapsed time*. Students use physical tools like protractors and rulers to draw, measure, and compare angles labeled as acute, obtuse, or right, while teacher prompts guide structured mathematical discussions.

Hands-on activities, such as modeling fractions and decimals or sorting geometric figures, support vocabulary like parallel sides, symmetry, and volume. Mathematical Discourse boxes and ELL support embedded in the lessons encourage peer-to-peer dialogue using formal academic language, while teacher questioning helps clarify and connect terminology to visual and physical representations.

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.

Ready Texas Mathematics grade 4 materials meet all criteria by including embedded educator guidance to scaffold and extend students' use of academic vocabulary in context when communicating with peers and educators. Educator prompts and supports are embedded throughout lessons, such as in a grade 4 lesson on length, liquid volume, and mass, where students describe measurement strategies using unit-specific vocabulary. Materials provide explicit instructional strategies, including flashcards, word walls

with diagrams, and vocabulary-rich questioning techniques, to support student understanding of specialized terms like points, lines, rays, and angles.

The *Teacher Edition* incorporates Math Discourse prompts, such as in Unit 1, Lesson 5, where students explain multiplication strategies using academic terms like *factors* and *product*. In Unit 5, Lesson 23, teacher guidance includes reviewing terms such as *parallel* and *right angle*, followed by prompting students to justify classifications using those terms. The Think-Pair-Compare routine supports structured academic discourse, while ELL Support boxes offer adaptations to scaffold language, clarify mathematical vocabulary, and guide precise usage. For instance, in Lesson 16, educators are prompted to clarify the distinction between informal and academic terms such as *larger* and *greater than*. Students apply vocabulary to real-world contexts, such as describing conversions between inches and feet using measurement tools and sharing explanations with peers. Word wall activities further extend vocabulary use by connecting terms to visual examples from daily life.

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

Ready Texas Mathematics grade 4 materials include embedded guidance to support student application of appropriate mathematical language and academic vocabulary in discourse. *Ready Texas Mathematics* consistently embeds "Mathematical Discourse" sections in every grade 4 lesson, providing educators with prompts and sample responses that foster precise academic language use. In lessons on fractions and decimals, students use mathematical terms such as *hundredths*, *numerator*, *denominator*, and *equivalent*, while analyzing relationships and justifying their thinking with grid models and visual fraction representations.

Teachers guide students to label models and articulate their reasoning using academic vocabulary like *halves*, *thirds*, and *equal shares*. In geometry-focused lessons, prompts such as "What is the importance of labeling points of a geometric figure?" support discourse using terms like *rays*, *angles*, and *degrees*. At the same time, paired activities reinforce communication and clarification through partner-based drawing tasks. Rounding and estimation strategies also include embedded prompts requiring students to discuss mathematical reasoning with vocabulary like *compatible numbers* and *products*, encouraging meaningful discourse in pair-share and whole-class formats.

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

Ready Texas Mathematics grade 4 materials include embedded guidance to facilitate mathematical conversations, allowing students to hear, refine, and use math language with peers. Structured routines such as Think-Share-Compare and Mathematical Discourse are used in every grade 4 lesson. These routines support students in collaboratively building mathematical proficiency through individual think time, partner discussions, written reflections, and whole-class discourse. For example, in lessons on

decimals and fractions, educators are prompted to ask questions like, "How can you explain the way the model shows 248 pennies?" and "What do you notice that is the same about the mixed number and the 'dollars and cents'? What is different?" Prompts encourage students to articulate and refine their mathematical language in peer conversations. In Lesson 24: "Symmetry," students discuss how they know a shape has a line of symmetry using terms such as *mirror image*, *fold line*, and *symmetrical*, which fosters precise vocabulary use and deepens conceptual understanding through exposure to classmates' explanations.

Step-by-step guidance in Lesson 10 directs teachers to organize students in pairs or groups and use Mathematical Discourse questions to support or extend thinking during discussions. The materials provide answers and key listening points to help teachers lead rich mathematical discussions. This embedded guidance systematically supports students in hearing math language with peers and refining their use of academic vocabulary in discourse.

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.

Ready Texas Mathematics grade 4 materials include embedded guidance to anticipate various student answers, including exemplar responses to questions and tasks, and support or redirect inaccurate student responses. "Mathematical Discourse" sections in each lesson provide exemplar student responses to teacher prompts. For example, in a lesson on understanding decimals, when asked, "How could you show that 3 tenths + 4 hundredths has the same value as 34 hundredths?", the materials provide a model response explaining that both equal 0.34, illustrated with a grid showing 34 of 100 squares shaded, supporting clear student understanding.

Assessment and Remediation charts at the end of lessons include questions with exemplar answers alongside common student errors, explanations for misconceptions, and specific remediation strategies.

Misconception Alerts help teachers anticipate errors, such as believing that fractions are always less than one. They provide guidance on using fraction strips to demonstrate fractions greater than or equal to one and encourage student use of this vocabulary. Error Alert boxes offer targeted support, for instance, addressing computational errors in regrouping during addition and subtraction problems and offering teacher guidance on explaining why incorrect answer choices are invalid. This embedded guidance ensures educators are prepared to effectively support, clarify, and redirect student responses.

5.5 Process Standards Connection

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

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

Ready Texas Mathematics grade 4 materials meet the criterion that TEKS Process Standards are integrated appropriately into the materials. Each grade 4 lesson identifies specific TEKS Process Standards through embedded MPS Tips in the *Teacher Edition*, providing targeted guidance aligned to individual standards such as 4.1C, 4.1E, 4.1G, and others.

Lessons incorporate problem-solving strategies, justification of reasoning, and the use of mathematical tools, as seen when students use number lines to model sums or discuss the effectiveness of multiplication strategies using area models and standard algorithms. Materials encourage logical reasoning, data interpretation, and explanation of conclusions in lessons involving dot plots and stem-and-leaf plots, reinforcing TEKS 4.1E and 4.1G.

"Real-World Connection" sections integrate real-world problem-solving, such as a lesson on adding and subtracting fractions, where students explore practical applications and generate exemplar responses.

Answering the Demands of the TEKS overview explicitly addresses the role of MPS, conceptual understanding, and higher-order thinking, demonstrating that the TEKS Process Standards are fully and appropriately embedded throughout the instructional design.

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

Ready Texas Mathematics grade 4 materials meet the criteria that include a description of how process standards are incorporated and connected throughout the learning pathways. The *Teacher Edition* embeds MPS Tips consistently in each lesson, providing educators with specific guidance on how students can engage in problem-solving, justification, and representation aligned with TEKS standards such as 4.1C, 4.1D, 4.1E, 4.1F, and 4.1G. In grade 4, lessons on equivalent fractions support students in reasoning with Visual Models and explaining their thinking in writing, while lessons on data and measurement emphasize selecting tools and interpreting results. MPS Tips prompt students to transform numbers across forms and understand numerical structure, reinforcing mathematical meaning.

A chart in the front matter outlines the integration of real-world contexts, multiple representations, and cooperative dialogue in every lesson, ensuring process standards are intentionally embedded. Learning

pathways support concept development through guided instruction and problem sets that connect process skills across units, such as using input-output tables and expressions to describe numerical patterns and rules.

The Implementation Guide and teacher resources detail how instruction leads students through progressively rigorous tasks that reinforce and apply mathematical habits of mind.

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

Ready Texas Mathematics grade 4 materials meet the criterion by consistently including an overview of the TEKS process standards incorporated into each lesson. The *Teacher Edition* begins each lesson with a "TEKS Focus" section that identifies the specific process standards addressed, such as 4.1A, 4.1C, 4.1D, 4.1F, and 4.1G, in decimals, multiplication, and geometry lessons.

MPS Tips embedded throughout the lessons provide educators with specific guidance on how to address these standards during instruction. For example, in Lesson 22, process standards 4.1C and 4.1F guide students in applying reasoning and justifying their thinking while classifying angles. In Lesson 5, an MPS Tip supports 4.1D by encouraging the use of area models to develop conceptual understanding of multiplication. Lesson 26 connects 4.1F to student learning through constructing logical arguments related to angle addition, while in Lesson 1, the TEKS Focus includes 4.1A, 4.1C, 4.1D, and 4.1F. The consistent presence of clearly identified process standards and related instructional supports ensures educators are equipped to develop students' reasoning, communication, and problem-solving skills across all lessons.

6. Productive Struggle

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

6.1 Student Self-Efficacy

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

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

Ready Texas Mathematics grade 4 materials meet the criteria by providing students with frequent opportunities to think mathematically, persevere through solving problems, and make sense of mathematics. Lessons incorporate the Think-Pair-Share routine and open-ended questions that encourage mathematical discourse and reasoning. In a lesson on dividing whole numbers, students explain how the division algorithm connects to an area model and interpret remainders in real-world contexts, supporting sense-making and problem-solving persistence. In lessons on fraction and decimal operations, students use number lines, consider multiple strategies, and justify their reasoning with partners.

Each lesson builds on prior knowledge and includes performance tasks that require integration of multiple standards and allow for various solution approaches. In TEKS Practice activities, word problems related to measurement and financial literacy engage students in choosing appropriate units and reasoning about real-life scenarios, further supporting their ability to think mathematically and make meaningful mathematical connections.

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

Ready Texas Mathematics grade 4 materials meet the criteria by supporting students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks. Students use models such as place-value charts, drawings, money, fractions, and bar diagrams to demonstrate alternate solution paths, as seen in activities like writing a decimal less than 0.76 and justifying the answer with visual or numerical models. Lessons on multiplication introduce a variety of strategies including partial products, mental math, area models, and properties of operations, with consistent prompts for students to explain and justify their chosen methods.

Prompts like "What is another way you could solve this problem?" and "Which method do you prefer, and explain?" guide students in articulating their thinking and evaluating the efficiency of strategies. Instructional routines like Think-Pair-Compare structure discussions in which students share how their strategies differ and why they work. Classification of shapes using sides or angles and tasks that ask students to consider alternate diagrams or variable choices further promote the understanding that problems can be approached in multiple valid ways.

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.

Ready Texas Mathematics grade 4 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 through modeling with manipulatives, solving real-world problems, working in pairs, and using tools such as protractors, data tables, and place-value charts, as seen in grade 4, Lessons 11, 15, and 26.

Students write about math using journal prompts, TEKS Practice questions, and lesson-based responses that ask them to explain errors, compare models, and justify solutions, as in questions like, "What did she do wrong? Explain" and "Why is it helpful to write fractions in different ways?"

Students discuss math through Think-Pair-Compare routines, whole-class discourse, and small-group conversations on topics such as fractional equivalence, problem-solving strategies, and model effectiveness. Lessons consistently embed these instructional components, ensuring students engage deeply with content through doing, writing, and discussing math.

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.

Ready Texas Mathematics grade 4 materials support educators in guiding students to share and reflect on their problem-solving approaches by embedding prompts that elicit explanations, arguments, and justifications throughout lessons. Students are prompted to discuss questions such as, "What is the difference between adding fractions and subtracting fractions on a number line?" and "What is another way to solve this problem?", which encourages sharing explanations and arguments. The materials include reflective writing tasks, for example, asking students to "Think about rounding and compatible numbers. Which method do you prefer? Do you think you can use either method with any operation? Explain," supporting written justifications. In Lesson 5, students share explanations and justify multiplication strategies, with teacher prompts like, "Why would you use distributive property?" and discussions about the efficiency of different methods. Lesson 26 guides students to explain and justify strategies for finding missing angles with prompts such as, "Explain why you cannot add the angle measures given?"

Throughout lessons, educators are encouraged to prompt students to justify ideas using models and to explain their reasoning in pairs or groups. The Think-Pair-Compare routine consistently supports sharing and reflecting through stages including discussing, comparing strategies, connecting, and reflecting. In grade 4, students use pictorial models and number lines to solve fraction problems and engage in discourse by explaining, arguing, and justifying approaches, responding to questions like, "How could you use fractions to label 0 and 1 on the number line?" and "What is another way you could solve the problem?" Students also justify findings in geometry by explaining how they identified all lines of symmetry in polygons. These embedded supports systematically guide educators in facilitating students' sharing and reflection on problem-solving explanations, arguments, and justifications.

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

Ready Texas Mathematics grade 4 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 offer guidance for identifying student misconceptions and suggest remediation strategies. Lesson 9 prepares educators to correct the misconception that a larger denominator means a larger fraction, encouraging use of representations to clarify the concept. In

Lesson 17, teachers are guided to address errors in decimal alignment by prompting students to check decimal point placement, reinforcing understanding of place value.

The *Teacher Edition* contains Error Alert boxes, such as one in Lesson 17 indicating students forgot to add a regrouped one in decimal addition. Educators receive prompts during lessons on identifying parallel and perpendicular lines, including discussion of railroad tracks as an example to clarify common misunderstandings. An Error Alert addresses students who count parallel sides incorrectly by counting each side separately rather than as a set. When comparing ounces and pounds using bar models and tables, teachers are guided to reinforce the relationship between larger and smaller units, explaining why multiplication, not division, is needed when converting to smaller units. These embedded prompts and guidance consistently support educators in providing explanatory feedback based on both student responses and anticipated misconceptions.