# Curriculum Associates, LLC

English Mathematics, 5

i-Ready Classroom Texas Mathematics, Grade 5

| MATERIAL TYPE | ISBN | FORMAT | ADAPTIVE/STATIC |
|---|---|---|---|
| **Full-Subject, Tier-1** | **9781663057846** | **Both Print and Digital** | **Static** |

## Rating Overview

| TEKS SCORE | ELPS SCORE | ERROR CORRECTIONS (IMRA Reviewers) | SUITABILITY NONCOMPLIANCE | SUITABILITY EXCELLENCE | PUBLIC FEEDBACK (COUNT) |
|---|---|---|---|---|---|
| 100% | 100% | 1 | Flags Addressed | Flags in Report | 0 |

## Quality Rubric Section

| RUBRIC SECTION | RAW SCORE | PERCENTAGE |
|---|---|---|
| 1. Intentional Instructional Design | 28 out of 28 | 100% |
| 2. Progress Monitoring | 24 out of 26 | 92% |
| 3. Supports for All Learners | 27 out of 27 | 100% |
| 4. Depth and Coherence of Key Concepts | 19 out of 19 | 100% |
| 5. Balance of Conceptual and Procedural Understanding | 34 out of 41 | 83% |
| 6. Productive Struggle | 22 out of 22 | 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 | 2 | 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 | 1 | 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 | 14 |
| Category 6: Promoting Sexual Risk Avoidance | 0 |

# IMRA Quality Report

## 1. Intentional Instructional Design

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

### 1.1 Course-Level Design

| GUIDANCE | SCORE SUMMARY | RAW SCORE |
|---|---|---|
| 1.1a | All criteria for guidance met. | 4/4 |
| 1.1b | All criteria for guidance met. | 2/2 |
| 1.1c | All criteria for guidance met. | 2/2 |
| 1.1d | All criteria for guidance met. | 2/2 |
| 1.1e | All criteria for guidance met. | 2/2 |
| — | **TOTAL** | 12/12 |

#### 1.1a – Materials include a scope and sequence outlining the TEKS, ELPS, and concepts taught in the course.

The *i-Ready Classroom Mathematics* "Scope and Sequence" details lessons that correlate to grade 5 Texas Essential Knowledge and Skills (TEKS) and English Language Proficiency Standards (ELPS), and outlines a progression of learning throughout the grade levels. For example, the "Scope and Sequence" directs teachers to four lessons that teach students to write and interpret numerical expressions.

The materials include a "Scope and Sequence" that outlines the order of math concepts taught throughout the instructional year.

A separate "TEKS Correlation Guide" is also included with materials to show the correlation of the TEKS.

#### 1.1b – Materials include suggested pacing (pacing guide/calendar) to support effective implementation for various instructional calendars (e.g., varying numbers of instructional days – 165, 180, 210).

The grade 5 Pacing Guide includes a progression through the TEKS in five units of study, containing 32 lessons for the school year.

The materials include a suggested Pacing Document that outlines the concepts in each unit and the suggested pacing for each unit. The materials include suggested pacing for various instructional calendars, providing suggested pacing for teachers to develop a flexible calendar spanning 147–171 days and one for 160 days of instruction.

### 1.1c – Materials include an explanation for the rationale of unit order as well as how concepts to be learned connect throughout the course.

The "Unit 1 Learning Progressions Chart" summarizes how lessons in the number operations unit build upon each other. The document explains the rationale of unit order and how concepts to be learned connect throughout the course.

The "Unit Flow and Progression Videos" provide explanations about the logic behind unit progression and conceptual connections across units, describing the intentional purpose of each unit and its sequence.

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

The materials include comprehensive protocols with corresponding guidance for unit and lesson internalization. Each unit includes a "Unit Overview" section that outlines themes within the unit, and each lesson has a lesson overview containing information on learning objectives and prior knowledge.

The Teacher's Guide Overview features an implementation guide that offers protocols for internalizing units and lessons with teacher guidance on effective utilization.

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

The materials provide recorded model lessons for instructional leaders and include a "Lesson Implementation Guide" with effective implementation strategies.

The materials do not include specific tools for instructional leaders to monitor whether teachers are correctly implementing the curriculum in their classrooms.

The materials also do not provide guidance for leaders on how to support teachers when they encounter difficulties with unique features and approaches of the mathematics curriculum.

## 1.2 Unit-Level Design

| GUIDANCE | SCORE SUMMARY | RAW SCORE |
|---|---|---|
| 1.2a | All criteria for guidance met. | 2/2 |
| 1.2b | All criteria for guidance met. | 2/2 |
| — | **TOTAL** | 4/4 |

### 1.2a – Materials include comprehensive unit overviews that provide the background content knowledge and academic vocabulary necessary to effectively teach the concepts in the unit.

The materials include comprehensive unit overviews with background content knowledge and academic vocabulary support. Each unit features "Prerequisite Lessons" that specify the grade and lesson where background content was previously taught. For example, in Unit 2, Lesson 9, students learn to compare and round decimals, and the unit overview lists grade 4, Lesson 27, Compare Decimals to Hundredths, as a prerequisite lesson.

"Unit Overviews" list new, review, and academic vocabulary for each lesson, and the "Build Your Vocabulary" sections guide teachers in supporting students with unit vocabulary words.

### 1.2b – Materials contain supports for families in both Spanish and English for each unit with suggestions on supporting the progress of their student.

The materials include "Family Letters" that inform families in both Spanish and English about the objectives of each lesson within the unit. For example, in Unit 2, Lesson 12, the family letter focuses on adding fractions with unlike denominators and provides visual examples of fractions with different denominators.

The "Unit Flow Progression Video" for each unit "involves families with the ideas and concepts taught in the curriculum."

## 1.3 Lesson-Level Design

| GUIDANCE | SCORE SUMMARY | RAW SCORE |
|---|---|---|
| 1.3a | All criteria for guidance met. | 8/8 |
| 1.3b | All criteria for guidance met. | 3/3 |
| 1.3c | All criteria for guidance met. | 1/1 |
| — | **TOTAL** | 12/12 |

### 1.3a – Materials include comprehensive, structured, detailed lesson plans that include daily objectives, questions, tasks, materials, and instructional assessments required to meet the content and language standards of the lesson (aligned with the TEKS and the ELPS).

The materials include structured lesson plans with content and language objectives, questions, tasks, materials, and assessments. Each lesson overview focuses on communication and discussion and provides instructional assessments, such as exit tickets and comprehension checks.

The "Sequence and Pacing Guide for the Year" outlines the corresponding TEKS and ELPS for each lesson.

### 1.3b – Materials include a lesson overview listing the teacher and student materials necessary to effectively deliver the lesson, and the suggested timing for each lesson component.

The materials include comprehensive lesson overviews with detailed material lists and timing guidance. Each lesson's "Pacing" section clearly identifies teacher materials such as presentation slides and "Math Toolkit" resources, as well as student materials needed for effective lesson delivery.

The "Pacing Guides" provide specific timing for each lesson component, including detailed time allocations such as Start (5 minutes), Monitor & Guide (15–20 minutes), Group & Differentiate (20–30 minutes), and Close: Exit Ticket (5 minutes).

### 1.3c – Materials include guidance on the effective use of lesson materials for extended practice (e.g., homework, extension, enrichment).

The lesson overviews provide guidance for extended practice through multiple avenues. Each lesson includes a "Differentiation" section with extension opportunities, and "Deepen Understanding" activities for enrichment.

Teachers receive guidance on assigning "Additional Practice" activities such as "Prepare for Adding and Subtracting in Word Problems" as extra practice in class or as homework, and "Deepen Connection" sections offer specific instructions for extension activities.

# 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 | Materials do not include formative assessments that vary in types of questions, and tasks at the unit level. | 7/9 |
| 2.1b | All criteria for guidance met. | 2/2 |
| 2.1c | All criteria for guidance met. | 2/2 |
| 2.1d | All criteria for guidance met. | 6/6 |
| 2.1e | All criteria for guidance met. | 2/2 |
| — | **TOTAL** | 19/21 |

### 2.1a – Materials include a variety of instructional assessments at the unit and lesson level (including diagnostic, formative, and summative) that vary in types of tasks and questions.

The materials include a variety of instructional assessments at designated stages of learning progressions. The grade 5 Teacher's Guide Assessment Guide outlines diagnostic assessments administered at the beginning, middle, and end of year, along with formative assessments during/after individual lessons, mid-unit assessments during longer units, and summative assessments at the end of each unit.

The "*i-Ready* Diagnostic Assessment" provides insights into student learning progressions and informs differentiated instruction to make grade-level material accessible. Data from this assessment will generate a "Prerequisites" report that helps teachers identify student learning gaps in prerequisite skills needed for grade-level math content.

However, materials do not include additional formative assessments at the unit level beyond the beginning of year, middle of year, and end of year.

Summative assessments are included at the end of each unit through the "Unit Assessments" or digital "Comprehension Checks."

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

The materials include an implementation document outlining the purpose and definition for each type of assessment in the program. For example, it states that "formative assessment is a process used during instruction to monitor student learning and provide feedback for improvement."

The grade 5 Teacher's Guide provides the name, timing, location, and related digital assessment support for each assessment type, but lacks clear definitions. However, the materials do include the intended purpose for assessments, explaining that diagnostic test data generates prerequisite reports to help teachers identify learning needs for incorporation into year-long instruction.

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

The materials include comprehensive teacher guidance for consistent and accurate assessment administration. Each lesson quiz in the grade 5 Teacher's Guide provides clear explanations of tested skills, error alerts, problem notes, depth of knowledge levels, and detailed rubrics for individual questions, ensuring both consistency and accuracy in administration.

In the grade 5 Teacher's Guide, the lesson quizzes provide detailed rubrics, error alerts, problem notes, and depth of knowledge levels for each item, which ensure consistency and accuracy in assessment administration.

Additionally, the Teacher Toolbox provides teacher-facing tools for interpreting student performance, including class-level and individual performance summaries derived from comprehension checks. These tools support consistent scoring practices and enable teachers to monitor assessment outcomes across their classrooms.

### 2.1d – Diagnostic, formative, and summative assessments are aligned to the TEKS and objectives of the course, unit, or lesson.

The "*i-Ready* Diagnostic Assessment" is aligned to the TEKS and objectives of the grade 5 *i-Ready Mathematics* curriculum.

The formative and summative assessments are aligned to the TEKS and objectives of the lesson and unit assessments.

The "Process Standards Correlations" serve as a guide for teachers to view the correlation of the TEKS process standards with the Standards for Mathematical Practice (SMP).

### 2.1e – Instructional assessments include TEKS-aligned items at varying levels of complexity.

The instructional assessments include multiple levels of complexity, such as fill-in-the-blank, multi-select, multiple choice, and short and extended constructed response items found in lesson quizzes and unit assessments. These varied formats support different depths of understanding.

All assessments include TEKS-aligned items. For example, the "Unit Assessment Scoring Guide" provides a table that demonstrates the alignment of each problem number to the Depth of Knowledge (DOK), points for scoring, TEKS addressed, and the lesson assessed by each problem.

## 2.2 Data Analysis and Progress Monitoring

| GUIDANCE | SCORE SUMMARY | RAW SCORE |
|---|---|---|
| 2.2a | All criteria for guidance met. | 2/2 |
| 2.2b | All criteria for guidance met. | 1/1 |
| 2.2c | All criteria for guidance met. | 2/2 |
| — | **TOTAL** | 5/5 |

### 2.2a – Instructional assessments and scoring information provide guidance for interpreting student performance.

The grade 5 *i-Ready Mathematics* materials include comprehensive guidance for interpreting student performance through multiple assessment tools and scoring mechanisms. Each lesson quiz in the grade 5 Teacher's Guide provides clear explanations of tested skills, error alerts, problem notes, depth of knowledge levels, and detailed rubrics for individual questions, ensuring both consistency and accuracy in administration.

The materials incorporate Depth of Knowledge levels. Each problem indicates a DOK level and includes sample solutions, misconceptions, and explanatory notes.

The Teacher Toolbox provides performance analytics through digital diagnostic results that break down individual student performance against averages. Formative assessment supports include scoring rubrics with clear guidelines for interpreting student performance and responses. "Comprehension Check" summaries outline both individual student and class assessment results to determine understanding of instructional materials.

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

The grade 5 materials provide comprehensive guidance for using assessment data to inform instructional decisions and differentiation. A five-tier system uses assessment results to place students into recommended instructional groups based on their performance levels, while differentiated activities provide center activities with aligned tasks for below-level, on-level, and above-level learners.

Instructional guidance offers teacher recommendations for next instructional steps based on performance trends, with gap-closing tools providing specific lessons and activities recommended to address individual understanding gaps.

Post-assessment support is provided after both the "Unit 2 Assessment" and Lesson 4 Quiz, where differentiation resources are specified for reteaching, reinforcing, and enriching based on student performance. Targeted response protocols through "Responding to Students' Needs" sections identify

lessons that should be retaught, and provide enrichment activities for students who exceed proficiency on assessments.

### 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 materials provide robust progress monitoring systems for both teachers and students to track mathematical growth over time. Teacher tools include growth reporting through diagnostic growth reports that summarize performance across diagnostic windows.

Data analysis support provides guides detailing report interpretation at district, school, class, and individual levels, while collaborative review through "Teacher and Leader Data Charts" provides structured data reflection opportunities.

Student tools include "Daily Learning Reflections" and "Student Data Charts" for self-assessment and data tracking, along with "My Weekly *i-Ready* Progress sheets" to record lesson completion, scores, learning reflections, and ongoing questions.

# 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 marked with a (T) refers to teacher-facing components. Guidance with an (S) refers to student-facing components.

| GUIDANCE | SCORE SUMMARY | RAW SCORE |
|---|---|---|
| 3.1a | All criteria for guidance met. | 3/3 |
| 3.1b | All criteria for guidance met. | 2/2 |
| 3.1c | All criteria for guidance met. | 2/2 |
| — | **TOTAL** | 7/7 |

### 3.1a – Materials include teacher guidance for differentiated instruction, activities, and paired (scaffolded) lessons for students who have not yet reached proficiency on grade-level content and skills.

Materials include teacher guidance for differentiated instruction for students who have not yet reached proficiency on grade-level content and skills. Each lesson contains reteach "Tools for Instruction" documents. The reteach activities contain activities and scaffolded lessons for students who have not met grade level proficiency. For example, the grade 5, Lesson 1, "Understand Volume" lesson prerequisite activities and instruction support the prerequisite skills of volume concepts, finding area, and perimeter and area, to support learners not yet at grade level proficiency. Materials include teacher guidance for differentiated and paired scaffolded lessons for students who have not yet reached proficiency on grade-level content and skills.

The *i-Ready Mathematics* materials identify class prerequisite needs and include recommended resources for prerequisite skills while maintaining pace with grade-level instruction. For example, groups with in-depth review needs are provided along with Tools For Instruction to address below-level student needs.

### 3.1b – Materials include pre-teaching or embedded supports for unfamiliar vocabulary and references in text (e.g., figurative language, idioms, academic language). (T/S)

Materials include pre-teaching for unfamiliar vocabulary in the text. Lessons contain teacher guidance to develop academic language. For example, the Teacher's Guide for grade 5, Lesson 5, Session 4 clarifies the usage of the word *dozen*. Students are prompted to use the new academic vocabulary with sentence stems.

The materials include embedded supports for unfamiliar references in the text. The "Interactive Tutorials" include embedded vocabulary support for students to select an unfamiliar or new academic term, and also includes a definition, visual, and the pronunciation to enhance vocabulary acquisition.

### 3.1c – Materials include teacher guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skill.

The m include teacher guidance for differentiated instruction for students who have demonstrated proficiency in grade-level content and skills. The *i-Ready Mathematics* materials include differentiated math center activities for on-level and above-level students.

The materials also include teacher guidance for enrichment and extension activities for students who have demonstrated proficiency in grade-level content and skills. Differentiation guidance accompanies each lesson in the Teacher's Guide. For example, in grade 5 Lesson 4, Session 4, the materials provide challenge activities for students extending beyond proficiency to multiply up to three- by four-digit numbers, and a "Reinforce" activity for students meeting proficiency to solve multiplication problems in a variety of formats.

## 3.2 Instructional Methods

| GUIDANCE | SCORE SUMMARY | RAW SCORE |
|---|---|---|
| 3.2a | All criteria for guidance met. | 4/4 |
| 3.2b | All criteria for guidance met. | 2/2 |
| 3.2c | All criteria for guidance met. | 3/3 |
| — | **TOTAL** | 9/9 |

### 3.2a – Materials include explicit (direct) prompts and guidance to support the teacher in modeling and explaining the concept(s) to be learned.

The materials include explicit (direct) prompts to support teachers to model and explain concept(s). For example, in the grade 5 Unit 2 materials, the "Math Background" document includes models, progressions, and teaching tips to support teachers. The concept of multiplicative comparison is explicitly explained with arrays, bar models, equations, and pictorial models. Teaching insights, along with examples and academic vocabulary, provide teacher support in explaining and modeling the concept of multiplication, factors, multiples, strip diagrams, and equations.

Lesson 6 insights include visual examples that explain the representation of multiplication with equal groups, arrays, area models, and grids. The materials also provide definitions, pictorial representations, and common error alerts to anchor student learning throughout the unit.

### 3.2b – Materials include teacher guidance and recommendations for effective lesson delivery and facilitation using a variety of instructional approaches.

The materials include guidance and recommendations for effective lesson delivery and facilitation using multiple instructional approaches. In the "Refine" component of student lessons, exit tickets require students to communicate math concepts in math journals. This guidance facilitates effective instruction and approach.

The materials include teacher guidance for collaborative practices to engage students such as the Try, Discuss, Connect framework. This instructional framework is a predictable structure that helps students make sense of problems, share their thinking with peers, and compare mathematical representations and approaches.

The materials include guidance for differentiated instruction through multiple grouping strategies, including whole-group instruction for introducing concepts, small-group work for targeted practice, and individual work for personalized learning. Teachers receive recommendations for when and how to implement each approach, based on student needs and lesson objectives.

### 3.2c – Materials support multiple types of practice (e.g., guided, independent, collaborative) and include guidance for teachers and recommended structures (e.g., whole group, small group, individual) to support effective implementation.

The materials support multiple types of practice (e.g., guided, independent, collaborative,) to support effective implementation. For example, the "Reinforce" segment of each lesson provides on-level, below-level, and above-level collaborative activities. The materials provide a variety of opportunities for students to practice and apply the concepts they learn, including individual, partnered, station/center, project-based, whole-group, and small-group opportunities. The materials include guidance for teachers to support effective implementation of multiple practice types.

The *i-Ready Mathematics* "Best Practices and Tips" include best practices for differentiating instruction. The materials recommend a teacher-led mini-lesson, a student-led collaborative station, and an independent station, allowing for multiple types of practice.

## 3.3 Support for Emergent Bilingual Students

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

| GUIDANCE | SCORE SUMMARY | RAW SCORE |
|---|---|---|
| 3.3a | All criteria for guidance met. | 2/2 |
| 3.3b | All criteria for guidance met. | 1/1 |
| 3.3c | All criteria for guidance met. | 8/8 |
| 3.3d | This guidance is not applicable to the program. | N/A |
| — | **TOTAL** | 11/11 |

### 3.3a – Materials include teacher guidance on providing linguistic accommodations for various levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language.

The materials include teacher guidance on providing linguistic accommodations for various levels of English language proficiency, in alignment with the ELPS. Each lesson contains a "Differentiation: English Learners" box that outlines scaffolds across three tiers of support: Light Support, Moderate Support, and Substantial Support. For example, in Lesson 6, Session 3, Light Support prompts teachers to encourage students to explain strategies for solving decimal subtraction using key academic language. Substantial Support suggests using sentence frames such as "I subtracted ___ from ___ to get ___," with visual cues and manipulatives. These supports are embedded directly within the lesson sequence to engage English learners in grade-level discourse.

The materials also include guidance aligned to all five ELPS proficiency levels. Lesson 15, Session 1 supports beginning-level students with sentence stems like "This shape has ___ sides," accompanied by labeled diagrams. Intermediate and Advanced students are encouraged to compare geometric attributes using terms like *parallel*, *perpendicular*, and *right angle*.

The "Resources for Language Development" section in the Teacher's Guide provides strategies such as using cognates, co-creating anchor charts, and building vocabulary walls. These tools are used throughout the unit to reinforce new terms and support cross-linguistic connections.

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

The materials include implementation guidance to support teachers with using the materials in state-approved bilingual/ESL programs. For example, every Lesson Overview includes explicit Language Objectives, such as in Unit 2, Lesson 5, which states, "Use comparative language to describe numerical patterns in class discussion." This objective supports structured oral interaction aligned with ELPS.

The "Resources for Language Development" outlines guidance for incorporating linguistic scaffolds including visual representations, language functions, and cognate support routines. The User Guide expands on these features by explaining how they support language acquisition and scaffold access to grade-level content across program models.

The "Professional Learning Library," a digital platform for teacher use, includes videos and implementation tools focused on strategies such as sentence frames, partner discussions, and sheltered instruction. These supports help teachers implement the materials effectively across multiple state-approved models, including transitional bilingual early-exit, transitional bilingual late-exit, ESL pull-out, and dual language programs.

### 3.3c – 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.

The materials include embedded guidance to support emergent bilingual students in developing academic vocabulary through oral and written discourse. For example, in Lesson 25, Session 2, the Develop Academic Language section provides sentence stems like "I started by ____. Then I ____ because ____," and the "Discuss It" section prompts students to use precise terms such as *numerator*, *denominato*r, *greater than*, and *less than* in partner discussions about their solutions. The materials include question prompts that help teachers guide students' use of academic language during math discussions.

Written language objectives are integrated into each lesson, with teachers directed to support oral discourse using exemplar responses, clarifying questions, and vocabulary prompts. For example, in Lesson 6, Session 2, students are encouraged to ask questions using frames like "Can you explain more about ___?" and "What does ____ mean?" to clarify a partner's explanation. The teacher models active listening and provides additional prompts such as "How did your model show equal groups?"

Tools such as the "Build Your Vocabulary" feature and the "Collect and Display" routine develop Academic vocabulary across the unit. These routines guide teachers in constructing word walls and anchor charts that grow over time, connecting everyday language with mathematical terms. For example, the Unit 2 of

the Teacher's Guide introduces terms such as *coordinate*, *axis*, and *ordered pair*, and encourages the use of visual displays, prior knowledge connections, and student dialogue to solidify understanding.

### 3.3d – 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. | 1/1 |
| — | **TOTAL** | 3/3 |

### 4.1a – Practice opportunities over the course of a lesson and/or unit (including instructional assessments) require students to demonstrate depth of understanding aligned to the TEKS.

Practice opportunities are aligned to the TEKS associated with the related lesson or unit. A "Practice Correlations" table provides an alignment indicating the relevant TEKS for each practice set by lesson.

Each "Apply It Problem" in every "Refine" session is designated by a Depth Of Knowledge level. "Apply It" problems also include recommendations for students approaching, meeting, and extending beyond proficiency.

The grade 5 Digital Teacher's Toolbox provides practice assessment opportunities, and unit assessments require students to access multiple DOK levels.

### 4.1b – Questions and tasks progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics TEKS.

Questions and tasks progressively increase in rigor and complexity, leading to grade-level mathematics proficiency. For example, a key feature of the Try, Discuss, Connect routine is "Select and Sequence" student strategies. This feature progressively increases the whole-class discussion in rigor and complexity.

Practice problems in "Explore and Develop" sessions for each lesson vary in difficulty level and are labeled as basic, medium, or challenge.

"Unit Lesson Progressions" explain connections between grade 4 and grade 5 concepts, and "Prior Knowledge" sections outline how learned concepts connect to new ideas.

## 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. | 3/3 |
| 4.2c | All criteria for guidance met. | 4/4 |
| — | **TOTAL** | 8/8 |

### 4.2a – Materials demonstrate coherence across units by explicitly connecting patterns, big ideas, and relationships between mathematical concepts.

The grade 5 materials demonstrate systematic coherence through explicit connections across units and learning progressions. "Unit Flow and Progression" videos outline how concepts link across units, while "Lesson Progression" charts show connections to previous learning and future development both within grade 5 and across grade levels.

In Unit 2, the "Lesson Progression" shows that Lesson 9 "Comparing and Rounding Decimals" requires knowledge from Lesson 6, "Decimal Place Value." and Lesson 12, "Powers of Ten.

The materials build conceptual relationships by connecting place value, decimals, and operations through clear learning dependencies. Cross-domain connections establish pathways among number operations, measurement, and algebraic thinking, reinforcing a coherent and structured learning experience.

### 4.2b – Materials demonstrate coherence across units by connecting the content and language learned in previous courses/grade levels and what will be learned in future courses/grade levels to the content to be learned in the current course/grade level.

The materials demonstrate coherence across units by connecting content across grade levels. The grade 5 materials provide explicit vertical alignment showing clear learning progressions from grade 4 through grade 6. Vertical progression through the Unit 1 "Lesson Progression" outlines grade 4 foundations and grade 6 preparations. Prerequisite integration ensures that each unit includes lessons that build on previous grade-level content and vocabulary.

Teacher materials provide language-development supports that summarize vocabulary and concepts necessary for grade-level mastery, and the skill progression mapping shows detailed connections between grade-level expectations and skill development. Examples include: grade 4 foundation, where students achieved proficiency with adding and subtracting multi-digit whole numbers and explored decimal concepts; grade 5 application, where students use models to subtract decimals to hundredths and explore adding-on-to-subtract strategies; and grade 6 preparation, where students will fluently add and subtract decimals to thousandths using standard algorithm.

Prerequisite lessons systematically connect previous grade concepts to current standard mastery requirements.

Teacher materials summarize vocabulary and concepts necessary for current grade mastery, with language objective connections in each lesson linking to previous learning.

### 4.2c – Materials demonstrate coherence at the lesson level by connecting students' prior knowledge of concepts and procedures from the current and prior grade level(s) to new mathematical knowledge and skills.

Each grade 5 lesson systematically connects prior knowledge to new learning through structured progressions and explicit skill building-sequences. Each lesson begins with a "Connect to Prior Knowledge" section that links to previous learning, and the Lesson Overview includes learning progression details that show how concepts build from previous grades.

"Learning Progressions" in lesson overviews detail connections between prior knowledge and current objectives, outlining how concepts build upon those learned in previous grade levels.

Procedure connections link current and prior grade-level procedures to new mathematical skills, and consistent problem-solving approaches maintain real-world problem-solving procedures across contexts. Examples include: Lesson 8, which connects grade 4 decimal place value understanding to grade 5 thousandths place recognition; Lesson 6, which extends grade 4 base-ten place value to decimals through pattern exploration. Volume understanding connects to grade 4 division concepts and grade 5 multiplication applications, and development of the standard algorithm builds systematically on place-value understanding from previous grade levels.

## 4.3 Coherence and Variety of Practice

| GUIDANCE | SCORE SUMMARY | RAW SCORE |
|---|---|---|
| 4.3a | All criteria for guidance met. | 4/4 |
| 4.3b | All criteria for guidance met. | 4/4 |
| — | **TOTAL** | 8/8 |

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

The grade 5 materials systematically provide spaced retrieval opportunities for students to practice and retrieve previously learned skills across multiple units and contexts. Unit 1 includes two assessments in grade 5 that require students to retrieve prior skills, including volume determination, division, and multiplication, to demonstrate proficiency with previously learned concepts.

Cross-unit problem solving through "Math in Action" activities builds on previously learned concepts in new contexts; in Unit 1, "Math in Action" asks students to use area models and partial products to solve real-life problems in various ways.

Learning strand connections in the "Lesson Progression" show how strands connect previous lessons to current applications. For example, in Unit 3, the Lesson Progression connects Unit 2, Lesson 6 (decimal place values) to Unit 3, Lesson 15 (multiplying a decimal by whole number), and skill-transfer applications demonstrate how grade 4 concepts support grade 5 advanced applications across different mathematical contexts and problem types.

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

The grade 5 materials provide systematic interleaved practice through cumulative practice sections and multi-session lesson structures spiraling previously learned skills. For example, in the grade 5, Unit 1 "Review," students practice volume, division, and place value representation.

Each lesson includes multiple sessions that give students time to build skills and understand concepts. Skills from earlier units are also practiced in new ways, helping students focus on key grade-level work while reinforcing what they previously learned.

Specific examples include Unit 2, "Cumulative Practice," with three sets: breaking apart figures for volume (Unit 1, Lesson 3), multiplying multi-digit numbers (Unit 1, Lesson 4), and dividing multi-digit numbers (Unit 1, Lesson 5).

Unit 4, "Cumulative Practice" spans multiple units: multiplying fractions in word problems (Unit 3, Lesson 22), dividing with unit fractions (Unit 3, Lesson 23), division word problems (Unit 3, Lesson 24), and

adding/subtracting fractions (Unit 2, Lessons 12–13). The Cumulative Practice demonstrates how grade 4 division concepts support grade 5 volume and advanced operation applications.

# 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. | 1/1 |
| 5.1c | All criteria for guidance met. | 1/1 |
| — | **TOTAL** | 5/5 |

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

The *i-Ready Mathematics* grade 5 questions and tasks require students to interpret models and representations for mathematical concepts and situations. In "Lesson 2, Explore," students examine a model representing volume and use it to explore volume representations on grid paper.

The *i-Ready Mathematics* grade 5 questions and tasks require students to analyze and evaluate models and representations for mathematical concepts and situations. For example, in Lesson 15, students analyze hundredths grid models representing decimal multiplication. Students evaluate models representing multiplication by ones, tenths, and hundredths to explore the concepts of decimal multiplication. Students then use the decimal models to connect to the standard algorithm of decimal multiplication.

### 5.1b – Questions and tasks require students to create models to represent mathematical situations.

The *i-Ready Mathematics* grade 5 questions and tasks require students to create models to represent mathematical situations. For example, in "Tools For Instruction," students construct models of rectangular prisms to find their volumes. Students explore the models with unit cubes to connect the model to the formula for volume.

In grade 5, Lesson 15, students create a model using fraction tiles to illustrate fractions as division. Students then use models to explain the process of dividing fractions.

In the *i-Ready Mathematics* grade 5 online "Interactive Tutorials," students use virtual manipulatives to create area models and number lines to represent operations with fractions and decimals. For example, in the digital component accompanying Lesson 15, students build and manipulate fraction tiles on screen to model the division of fractions, which deepens understanding by visually linking models to numerical procedures.

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

The *i-Ready Mathematics* grade 5 questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts. In grade 5, Lesson 18, "Apply It" students connect conceptual understandings of dividing fractions to solve real-world problems in new contexts.

Each lesson is accompanied by a "Refine" activity where students demonstrate conceptual understandings in real-world problem-solving tasks.

Through the digital component "Interactive Tutorials" in the online *i-Ready Mathematics* platform, students apply their conceptual understanding in real-world contexts by completing scaffolded, multi-step problem-solving tasks. For example, in the grade 5, Lesson 18 Interactive Tutorial, students apply their understanding of dividing fractions to a scenario involving recipe measurements, where they must determine how many servings a given amount of an ingredient can yield. The tutorial uses animation, narration, and manipulatives to connect students' reasoning with mathematical models and symbolic equations, allowing for the application of learned concepts in new 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 tasks.

The materials provide tasks to build student automaticity necessary to complete grade-level tasks. Each lesson provides an "Interactive Practice" activity that promotes automaticity of skills.

The materials also provide tasks to build student fluency necessary to complete grade-level tasks. Within the Student Digital Experience platform, the "Play Match Learning Game" serves as an interactive practice where students quickly match multiplication, division, addition, subtraction, and fraction facts. The games may be played at multiple speeds, which encourages increased fluency in students.

"Fluency and Skills Practice," located at the end of each lesson and in the Teacher's Toolbox, provides practice for students to develop greater number sense and computational fluency.

### 5.2b – Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within the lesson and/or throughout a unit.

The materials provide opportunities for students to practice the application of flexible mathematical procedures within the lesson and throughout a unit. For example, in grade 5, Lesson 6, students utilize various strategies to understand multiplicative properties. Students practice representing multiplication with arrays, bar models, written expression, and equations. Lessons prompt students to choose a method compatible with the numbers given, encouraging flexible problem-solving.

Materials provide opportunities for students to practice the application of accurate mathematical procedures within the lesson and/or throughout a unit. Accurate and efficient procedures are utilized throughout lessons. For example, in grade 5, Lesson 12, "Multiplying by Two-Digit Numbers," students create area models, use the distributive property, demonstrate knowledge of partial products, and use the standard algorithm.

## 5.2c – Materials provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson and throughout a unit.

Materials provide opportunities for students to evaluate the accuracy of procedures and solutions within lessons and across units. For example, in grade 5, Unit 2, Lesson 14, Session 3, students review a multi-digit division solution and explain whether the quotient is reasonable in the context of a word problem. Students justify their reasoning using appropriate mathematical vocabulary.

Materials support flexibility by encouraging multiple strategies to solve problems. In grade 5, students may use the standard algorithm, area models, or partial quotients to solve multi-digit division, and then discuss which method is most efficient for the situation.

## 5.2d – Materials contain embedded supports for teachers to guide students toward increasingly efficient approaches.

Materials contain embedded support for teachers to guide students toward increasingly efficient approaches. The Teacher's Guide contains embedded support to clarify common student misconceptions. In grade 5, Lesson 5, Session 1, embedded supports guide teachers in examining common student misconceptions, causing students to mistake multiplication or addition. Discussion questions prompt students to contextualize multiplication as a comparison. Embedded teacher questioning prompts students toward a more efficient answer.

Materials contain embedded support for teachers to guide students toward increasingly efficient approaches. The Teacher's Guide contains embedded support to prompt teachers in teaching more efficient approaches to math concepts. While multiplying two-digit by two-digit numbers in grade 5, embedded teacher materials guide teachers in beginning instruction with an area model, followed by connecting partial products to the area model. At the end of the lesson, the standard algorithm is introduced as a more efficient problem-solving method.

## 5.3 Balance of Conceptual Understanding and Procedural Fluency

| GUIDANCE | SCORE SUMMARY | RAW SCORE |
|---|---|---|
| 5.3a | Materials do not include how the conceptual and procedural emphases of the TEKS are addressed. | 0/2 |
| 5.3b | All criteria for guidance met. | 3/3 |
| 5.3c | All criteria for guidance met. | 6/6 |
| — | **TOTAL** | 9/11 |

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

The materials do not explicitly state how the conceptual and procedural emphasis of the TEKS are addressed. For example, in the grade 5 Teacher's Guide, the section Standards for Mathematical Practice (SMP) Correlations explains how the eight SMPs correlate to content within the materials; however, the TEKS are not referenced. The materials do not explicitly state how the procedural emphasis of the TEKS is addressed.

### 5.3b – Questions and tasks include the use of concrete models and manipulatives, pictorial representations (figures/drawings), and abstract representations, as required by the TEKS.

The materials include questions and tasks that include the use of concrete models and manipulatives, pictorial representations, and abstract representations. For example, in the Teacher's Guide, Lesson 3, Session 2, students use unit cubes to build volume models before writing formulas and expressions.

The materials include tasks that begin with concrete exploration and develop into abstract concepts. For example, in Lesson 6, Session 1, students calculate volume using drawings and explain the relationship between dimensions and formulas.

### 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 support for students to connect, define, and explain concrete and representational models to abstract concepts. For example, in the Teacher's Guide, Lesson 9, Session 4, students use area models to understand multiplication with decimals, and then explain their reasoning using equations.

The materials help students shift from hands-on exploration to abstract generalization through structured discussions and visual-to-symbolic progression.

In the grade 5 Teacher's Guide, Lesson 15, students analyze hundredths grid models representing decimal multiplication. Students also evaluate models for multiplication by ones, tenths, and hundredths, and use these decimal models to connect to the standard algorithm for decimal multiplication. This supports the transition from visual to symbolic representations and aligns with TEKS expectations for connecting and explaining concrete models to abstract concepts.

## 5.4 Development of Academic Mathematical Language

| GUIDANCE | SCORE SUMMARY | RAW SCORE |
|---|---|---|
| 5.4a | All criteria for guidance met. | 3/3 |
| 5.4b | All criteria for guidance met. | 1/1 |
| 5.4c | All criteria for guidance met. | 6/6 |
| — | **TOTAL** | 10/10 |

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

The materials provide opportunities for students to develop their academic language using visuals and manipulatives. For example, in the grade 5 Student Workbook, Lesson 3, Session 2, students are guided through a word problem using virtual unit cubes to find the volume of a rectangular prism in the "Try It" section. Students then discuss their strategy with a partner, and refer to a visual of a prism made from 1-inch cubes in the "Model It" section.

The materials provide opportunities for students to develop academic mathematical language using other language development strategies. For example, in the grade 5 Student Workbook, Lesson 3, Session 2, students complete a reflection in the "Connect It" section, using written expressions to explain and justify their preferred models and strategies.

### 5.4b – Materials include embedded teacher guidance to scaffold and support students' development and use of academic mathematical vocabulary in context.

Teacher materials include explicit guidance for developing word walls with mathematical terms, providing comprehensible input, and supporting students' use of academic vocabulary in context.

### 5.4c – Materials include embedded teacher guidance to support the application of appropriate mathematical language to include vocabulary, syntax, and discourse to include guidance to support mathematical conversations that provide opportunities for students to hear, refine, and use math language with peers and develop their math language toolkit over time as well as guide teachers to support student responses using exemplar responses to questions and tasks.

Materials include structured opportunities for students to engage in mathematical arguments using precise language, with teacher guidance on facilitating discussions about fraction equivalence, multiplication strategies, and problem-solving approaches.

Teacher guides provide exemplary student responses and prompts for helping students transition from informal language to mathematical precision, such as moving from "splitting numbers makes it easier" to "the distributive property allows me to decompose one factor to simplify multiplication."

The materials include guidance for small-group activities where students work together to solve word problems, with teacher support for encouraging precise mathematical language when explaining solution strategies. For example, in the grade 5 Teacher's Guide, Lesson 3, Session 2 "Try It" section, students solve a volume problem using unit cubes and then discuss their strategies with a partner using sentence frames in the "Discuss It" section.

The materials provide cross-linguistic connection opportunities where teachers guide students to identify similarities between mathematical concepts in their native language and English, supporting academic language development. For example, the grade 5 Teacher's Guide, Scope and Sequence, Pacing Guide, and Unit Overview includes embedded guidance on building background knowledge, comprehension, and cross-linguistic connections using strategies such as cognates and sentence frames.

## 5.5 Process Standards Connection

| GUIDANCE | SCORE SUMMARY | RAW SCORE |
|---|---|---|
| 5.5a | All criteria for guidance met. | 1/1 |
| 5.5b | The materials do not include the corresponding TEKS process standards. | 0/2 |
| 5.5c | The materials do not include reference to the corresponding TEKS process standards. | 0/2 |
| 5.5d | The materials do not include an overview of the TEKS process standards incorporated into each lesson. | 0/1 |
| — | **TOTAL** | 1/6 |

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

TEKS process standards are integrated appropriately into the materials. For example, the materials include opportunities for students to use a problem-solving model that incorporates analyzing given information (identifying what is known), formulating a plan (choosing appropriate strategies), determining a solution, and justifying the solution.

The materials provide opportunities for students to communicate mathematical ideas using multiple representations including symbols, diagrams, arrays, and mathematical language when explaining their reasoning.

Students have opportunities to select appropriate tools such as manipulatives (counters, base-ten blocks), visual models (arrays, area models), and techniques (mental math, estimation) to solve multiplication and division problems. For example, in Unit 1, Lesson 6, students solve multi-step problems involving volume. The lesson presents a scenario where students determine the number of unit cubes that fit in different box dimensions. Students use models and equations to represent and solve the task, then justify their strategy using terms like *layers*, *length*, *width*, and *height*. The task supports TEKS process standards by guiding students to make sense of the problem, choose and apply a volume strategy, and communicate their reasoning clearly through models and mathematical vocabulary.

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

The materials include the "Mathematical Process Standards in the TEKS (MPS)" document, which explains how process standards are used throughout *i-Ready Classroom Mathematics*. For example, there are eight process standards listed in bold that are interwoven throughout the course. One of the standards is to "apply mathematics to problems arising in everyday life, society, and the workplace."

The materials emphasize that the eight Mathematical Process Standards in the TEKS (MPS) are "built into the foundation of *i-Ready Classroom Mathematics*."

The materials do not include reference to the corresponding TEKS process standards number.

### 5.5c – Materials include a description for each unit of how TEKS process standards are incorporated and connected throughout the unit.

The materials include a "Standards for Mathematical Practice in Every Lesson (English and Spanish)" that explains how the Table of Contents indicates that all eight standards are embedded into each lesson.

The "Standards for Mathematical Practice in Every Lesson (English and Spanish)" highlights how the Try, Discuss, Connect" framework systematically incorporates process standards 1–6 across all lessons.

The materials do not include reference to the corresponding TEKS process standards, and list only the MPS number.

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

Each lesson includes a clear overview of which Mathematical Process Standards in the TEKS are addressed, with specific activities and tasks identified that support that MPS standard.

Materials include lesson-level guidance for teachers on how to facilitate process standard development, with specific prompts and strategies for supporting student engagement (e.g., "Deep Understanding" offers questions and supports for guiding classroom conversation to deep understanding of the mathematical process standard).

The lessons do not include reference to the corresponding TEKS process standards, and list only the MPS number.

# 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. | 6/6 |
| 6.1c | All criteria for guidance met. | 3/3 |
| — | **TOTAL** | 12/12 |

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

Grade 5 materials include open-ended problem-solving tasks such as "Create a word problem that involves multiplying a decimal by a whole number. Then, solve it," which requires students to think mathematically and apply conceptual understanding of operations.

Materials provide scaffolded questions that support perseverance, including prompts like "What is your first step?" and "What do you know that can help you here?" in the "Monitor & Guide" sections across lessons.

Students engage in hands-on exploration of concepts such as volume using unit cubes in Lesson 26, Session 1, before formal instruction on volume formulas begins.

Lessons are designed over multiple sessions, giving students repeated opportunities to work through problems, build connections, and explain their thinking using different representations.

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

Materials explicitly support understanding of multiple strategies, such as solving division problems using arrays, area models, and the standard algorithm, with opportunities to compare and justify methods in Lesson 17, Session 2.

Students use visual models, such as tape diagrams and number lines, to solve fraction word problems and then explain their reasoning in partner discussions and written reflections.

Prompts like "Can you solve it a different way?" and "What makes your strategy work?" appear in Discuss It sections and teacher questioning guidance to encourage deeper analysis.

The differentiation section provides sentence frames like "I used . . . because . . ." and "Another way to show this is . . ." to help students verbalize and compare strategies.

### 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 teachers.

The materials include hands-on math experiences where students measure, construct, and model mathematical ideas such as coordinate graphing, fraction equivalence, and area using manipulatives and drawings.

Students write about their mathematical thinking through structured prompts in Practice and Refine activities, such as "Explain how your model shows 3 × 2.4" or "Describe your process for comparing fractions."

Each session incorporates "Discuss It" and "Turn and Talk" prompts that engage students in peer conversations where they explain and revise strategies collaboratively.

Collaborative tasks found in the "Group & Differentiate" sections require students to solve complex, real-world problems together, and present their findings with written and oral justification.

## 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 teachers in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications.

The materials guide teachers in prompting students to reflect on and explain their problem-solving using questions such as, "What steps did you take and why?" and "How could you prove your solution is correct?" in the "Compare Strategies" sections.

Teacher guides include sample responses and questioning strategies to support mathematical arguments, such as, "What do you notice about the way your partner solved this?" and "Which model helped you make sense of the problem?"

Activities in lessons like Lesson 22, Session 3, prompt students to evaluate the efficiency of different methods and explain their reasoning in both small-group and whole-class settings.

Teacher supports include peer discussion routines that help students to share, critique, and build on each other's mathematical reasoning.

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

The materials include prompts and tools to help teachers address misconceptions, such as using place value charts and base-ten blocks when students misalign decimals in operations (e.g., Lesson 12, Session 2).

Embedded feedback suggestions in the Teacher's Guide include follow-up questions such as "What do you think happened here?" and "Can you explain why this does not match your model?" to guide reflection and correction.

Exit tickets and quizzes are supported with sample teacher feedback and scoring guidance that help teachers target support based on student work.

The Teacher Toolbox provides error analysis activities and intervention strategies, supporting teachers to help students diagnose their errors and reframe their thinking using visual and verbal reasoning.