Perfection Learning Corporation

Supplemental English Mathematics, 4

Measuring Up to the TEKS Mathematics Grade 4 Student/Teacher Package

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Supplemental	**9781663686855**	**Both Print and Digital**	**Static**

Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	163	0	Flags Addressed	Not Applicable	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	23 out of 23	100%
2. Progress Monitoring	21 out of 24	88%
3. Supports for All Learners	23 out of 39	59%
4. Depth and Coherence of Key Concepts	12 out of 16	75%
5. Balance of Conceptual and Procedural Understanding	30 out of 38	79%
6. Productive Struggle	17 out of 19	89%

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	0	0	0
6. Promoting Sexual Risk Avoidance	0	0	0
7. Compliance with the Children's Internet Protection Act (CIPA)	5	0	0

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

IMRA Quality Report

1. Intentional Instructional Design

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

1.1 Course-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.1a	All criteria for guidance met.	5/5
1.1b	All criteria for guidance met.	3/3
1.1c	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**	14/14

1.1a – Materials include an alignment guide outlining the TEKS, ELPS, and concepts covered, with a rationale for learning paths across grade levels (vertical alignment) and within the same grade level (horizontal alignment) as designed in the materials.

The materials include a table of contents that lists TEKS by chapter and lesson, demonstrating the sequence of math concepts (e.g., grade 4, Chapter 2: Decimals includes TEKS 4.2A–B in Lesson 9, 4.2E–F in Lesson 10, and 4.2F–H and 4.3G in Lesson 11).

Vertical alignment shows how math concepts build across grade levels (e.g., Lesson 1 Planner for TEKS 4.2A–B references grade 3 TEKS 3.2A–B and grade 5 TEKS 5.2A).

Chapter Overviews are at the beginning of each chapter. These additions explicitly connect TEKS and ELPS, provide horizontal and vertical alignment rationales, and explain how skills progress across and within grade levels.

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

The materials include clear guidance for adapting lessons to diverse learners, such as Striving Learners, Emergent Bilingual Learners, and students ready for more advanced challenges.

Each lesson provides extension activities to challenge students who have already mastered the concept (e.g., students play a game with digit cards and place value charts to practice comparison using

mathematical language). Instruction promotes multiple representations, student discourse, scaffolded supports, and extension opportunities throughout the lessons.

An implementation guide titled *What's Inside the Teacher Edition* explains how to use both the *Teacher* Edition and *Student Edition*. It includes instructional strategies for the whole-group, guided, and independent practice, as well as guidance on activating prior knowledge before introducing new concepts.

Differentiation strategies are embedded within lessons (e.g., grade 4, Lesson 2 guides teachers to use place value charts to support Striving Learners).

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

The materials include 2 STAAR®-like practice tests that help identify student learning gaps and strengths. Assessments can be given in print or through an online platform that generates reports for individual students, small groups, and the whole class to guide instruction.

However, there is no guide linking diagnostic assessment results to specific entry points in lessons or recommended instructional starting points.

The materials provide a TEKS correlation guide (Lesson Correlation) that lists the TEKS and identifies which lessons address each one (e.g., TEKS 4.4H is addressed in Lessons 5, 6, and 7).

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

The materials include processes to help educators understand and prepare to teach a concept, including lesson overviews with vocabulary, objectives, mathematical processes, materials, and learning progressions (e.g., grade 4, Lesson 23: Draw and Measure Angles).

Each lesson begins with a Lesson Planner that outlines TEKS-aligned learning objectives, mathematical processes, key vocabulary ("Words to Know"), materials, and vertical alignment showing how concepts build across grades (e.g., TEKS 3.7D–E → 4.8C → 5.7).

While the materials support lesson-level internalization, they also include protocols and guidance for chapter-level internalization and show how lessons progress across an entire module or chapter.

Chapter Overviews are included in the Teacher Edition. These Chapter Overviews provide clear chapter–level protocols for internalization, outline TEKS and ELPS for the chapter, summarize key concepts, and highlight vertical and horizontal connections, showing how lessons build across the unit.

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

The online platform provides data analysis tools to support team meetings and instructional planning when using the two STAAR® practice tests.

Resources are specifically designed to help instructional leaders support educators in implementing the materials as intended.

1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	All criteria for guidance met.	7/7
1.2b	This guidance is not applicable to the program.	N/A
1.2c	All criteria for guidance met.	2/2
—	**TOTAL**	9/9

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.

Each lesson includes a planner outlining TEKS-aligned learning objectives, mathematical processes, "Words to Know" vocabulary, materials lists, and vertical alignment to related grade-level TEKS.

Checks for understanding are embedded in lessons, including exit tickets, formative assessments, mathematical discourse prompts, peer discussions, and student self-reflection (e.g., the "How Am I Doing" section).

Concrete–Representational–Abstract (CRA) strategies and Universal Design for Learning (UDL) principles are referenced, offering varied learning methods, though time allocations for lesson components are not provided.

Chapter Overviews are at the beginning of each chapter which explicitly connect TEKS and ELPS.

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

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

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

The beginning-of-year letter, available in English and Spanish, introduces the program and provides general strategies to support student learning (e.g., encouraging regular practice and showing how math applies in daily life).

A tracking chart, also available in both languages, can be shared with families to help monitor student progress.

Chapter Family Letters in both English and Spanish are at the start of every chapter in the Student Edition.

2. Progress Monitoring

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

2.1 Instructional Assessments

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.1a	All criteria for guidance met.	2/2
2.1b	All criteria for guidance met.	2/2
2.1c	Materials do not include content and language supports, or an online calculator tool, for diverse student needs.	2/4
2.1d	All criteria for guidance met.	4/4
2.1e	All criteria for guidance met.	4/4
—	**TOTAL**	14/16

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

The *Implementation and Pacing Guide* defines the types of instructional assessments—diagnostic, formative, and summative—and explains their purposes and use within the program.

The guide explains that formative assessments, such as "Practice" in grade 3, are designed to reinforce skills after instruction and serve as scaffolded practice following the guided lesson.

Summative assessments, like Chapter Tests, serve dual purposes: they may be used formatively or summatively to assess TEKS mastery, check student progress, identify reteach opportunities, and prepare students for STAAR-style testing.

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

The *Implementation and Pacing Guide* includes an "Assessment Administration and Teacher Guidance" section to ensure assessments are administered consistently, equitably, and with instructional intent. Teachers receive guidance on when and how to administer assessments, including specific timing and scaffolding expectations (e.g., formative "Practice" assessments should follow the "Critical Thinking" section and may include modeling, hints, and prompts).

Teachers also receive reminders about question types to promote efficient and confident assessment delivery. The materials support scoring and data use, offering accommodation guidance and timing recommendations to maintain consistency and accuracy (e.g., p. xviii).

The *Teacher Edition* includes correct answers, Depth of Knowledge (DOK) levels, and instructional supports to ensure consistent and effective administration.

The *Teacher Edition* also provides tools such as assessment item analysis to help teachers identify performance patterns and adjust instruction accordingly.

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

The materials offer both digital and printable versions of assessments, including end-of-chapter assessments and two full-length STAAR-style assessments, accessible through the online dashboard.

The digital platform includes customizable accessibility tools to support individual student needs, such as line reader, magnifier, font-size adjustment, text-to-speech, and color-contrast settings.

Text-to-speech is an accommodation that can be enabled or disabled within the digital assessments. However, the platform does not offer content and language supports or an online calculator tool to accommodate diverse learners.

The *Teacher Edition* supports use of digital and printable formats and emphasizes enabling accessibility tools.

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

The materials include a practice test that can be administered at the beginning of the year as a diagnostic assessment to identify areas of student growth.

The diagnostic assessments are TEKS-aligned and include STAAR-style questions ranging from basic recall to higher-order thinking (e.g., problem solving, analysis, and strategic reasoning).

The assessments feature a variety of interactive item types, including multiple choice, drag and drop, fill-in-the-blank, drop-down menus, multi-select, graphing, number lines, and object selection.

End-of-chapter assessments are also TEKS- and STAAR-aligned, allowing students to demonstrate understanding in multiple formats (e.g., p. xi, p. 131).

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

The materials embed these assessments throughout instruction, such as activate prior knowledge tasks, guided instruction checks, critical-thinking activities, practice questions, end-of-lesson assessments, exit tickets, differentiation tasks, extension activities, and lesson-embedded tasks.

Exit tickets are STAAR- and TEKS-aligned and administered at the end of lessons (e.g., Lesson 1 Exit Ticket). Formative assessments use a range of interactive item types, including multiple choice, drag-and-drop, drop-down menus (inline choice), fill-in-the-blank (text entry), multi-select, graphing, and number lines.

Tasks and questions are designed with varying levels of complexity, aligned to Depth of Knowledge (DOK) levels, including basic recall (DOK 1), application and skill/concept (DOK 2), reasoning and strategic thinking (DOK 3), and extended thinking (DOK 4).

Examples from grade 4 include Chapter 1 Practice with DOK 1 and 2 items; Chapter 2 Practice with DOK 2 and 3 items; Lesson 24 assessment with multiple-choice, inline-choice, text-entry, and multi-select questions.

2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	Materials do not include scoring information, or rationales for correct or incorrect responses.	2/3
2.2b	All criteria for guidance met.	1/1
2.2c	All criteria for guidance met.	2/2
2.2d	All criteria for guidance met.	2/2
2.2e	This guidance is not applicable to the program.	N/A
—	**TOTAL**	7/8

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

The materials provide guidance for educators on interpreting student data through multiple reports, including Assignment Completion Status, Assessment Item Analysis, Assessment Score Analysis, Standards Proficiency Reports, Growth Reports, and Class Intervention Group Reports.

The Measuring Up Live platform includes scoring information and rationales for correct and incorrect responses, supporting teachers in analyzing student performance. Tools such as "What Do I Want to Know?" and "Which Live Up Report Will be Helpful?" guide teachers in selecting reports to inform instruction.

The print materials do not include scoring guidance or rationales for student responses (e.g., noted on p. xviii). Not all instructional assessments provide explanations for student responses. For example, in grade 4, Lesson 25, the end-of-lesson assessment lacks explanation for correct or incorrect answers.

The materials offer brief rationales for common student errors on some practice assessments. For instance, in grade 4, Chapter 1, Problem 1, a common error is identified with a hint to guide student understanding.

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

The materials provide guidance for using assessment data, including the Practice 1 Test and Prescriptive Answer Guide, to identify learning gaps and recommend corresponding reteach lessons.

The Measuring Up Live platform helps educators identify patterns in student errors and adjust instruction. It highlights performance trends, such as TEKS consistently missed by individual students or groups.

Educators receive guidance and tools to address these trends through reteaching or enrichment opportunities.

Reports such as *Standards Proficiency Reports* and prompts like "What Do I Want to Know?" and "Which Live Up Report Will be Helpful?" support data-informed instructional decisions.

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 Measuring Up Live platform provides tracking tools and reports for both teachers and students on TEKS and standards.

Teachers have access to reports that track student mastery and indicate whether skills or standards have been mastered, started, or not yet started. These reports update automatically based on assessment and task performance.

Students can use personalized Student Progress Dashboards to track their growth and progress on standards.

The platform incorporates best practices for digital assessment, including the option to provide immediate feedback after a student's first attempt at a question, if enabled by the teacher.

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.

"Critical Thinking" sections encourage teachers to assign selected problems and provide additional challenges for advanced learners.

Each lesson includes structured components—such as quick reviews, hands-on activities, bridge activities, and transitions to new learning—that incorporate partner talk, expected answers, and multiple opportunities for formative assessment.

The *Teacher Edition* features wraparound support aligned with the *Student Edition*, embedding prompts and instructional guidance throughout the lessons.

The materials provide frequent prompts and guidance for checking student understanding throughout each lesson and activity. Guided Instruction sections include sidebar questions to help teachers assess student thinking and provide real-time support.

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

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

3. Supports for All Learners

Materials support educators in reaching all learners through design focused on engagement, representation, and action/expression for learner variability.

3.1 Differentiation and Scaffolds

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.1a	All criteria for guidance met.	1/1
3.1b	All criteria for guidance met.	4/4
3.1c	All criteria for guidance met.	2/2
3.1d	Materials do not include integrated content and language supports.	1/3
3.1e	All criteria for guidance met.	2/2
—	**TOTAL**	10/12

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

The materials provide explicit teacher guidance and scaffolds to help students build proficiency with prerequisite or grade-level concepts.

Differentiation supports include sentence frames, repetition, simplified academic language, visual models, manipulatives, and graphic organizers.

In grade 4, Lesson 1, the *Teacher Edition* offers a differentiation activity that scaffolds understanding of place value using color-coding strategies. The differentiation section also includes instructions for teachers to use aides to support student learning.

The *Wraparound Student Edition* provides guidance for supporting emergent bilingual learners (ELLs) and Striving Learners throughout instruction.

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

The materials provide explicit teacher guidance for language supports, including preteaching academic vocabulary and Spanish cognates, aligned to the ELPS. Language supports are embedded within differentiation activities and EBL tips, which include structured prompts such as sentence stems to help students explain their thinking.

In grade 4, Lesson 2, the materials introduce essential academic vocabulary for the concept, including place value, greater than, digit, compare, less than, equal to, and order.

The materials provide sentence frames, structured tasks, and collaborative activities (partner, small-group, or whole-class) to promote academic language development and support language learners. Supports such as visual models, manipulatives, and graphic organizers help students access academic content.

The *Wraparound Student Edition* provides guidance for introducing academic vocabulary across lessons. Learn Together activities in the *Teacher Edition* prompt students to consider the vocabulary needed to understand each lesson; however, there is inconsistent evidence of explicit preteaching supports for unfamiliar references and academic vocabulary across all lessons.

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

The materials include explicit educator guidance for extension and enrichment activities to support students who have demonstrated proficiency in grade-level content and skills. The T*eacher* E*dition* includes extension activities intended for all students, including those who have mastered the content.

Extension tasks are designed to deepen learning through application, generalization, or creative problem-solving.

Critical-thinking prompts are embedded to encourage students to explain their reasoning, make real-world connections, and justify problem-solving strategies.

For example, in grade 4, Lesson 1, extension activities guide teachers to have students use concrete objects to model place value. In grade 4, Lesson 2, a critical-thinking prompt asks students to explain aloud how to use expanded form to multiply 673 by 100.

3.1d – Digital materials include accommodations, including text-to-speech, content and language supports, and calculators that educators can enable or disable to support individual students.

The Measuring Up Live online platform allows teachers to enable or disable specific accommodations, including line reader, magnifier, font-size adjustments, text-to-speech, and color-contrast options.

The digital materials provide adjustable accessibility tools, but feature availability is inconsistent: text-to-speech and font-size adjustments are available according to some sources, while other reports indicate these features may be missing or limited. Line reader, magnifier, and color-contrast options are available, but calculators are not included.

The digital materials do not include integrated content and language supports, such as vocabulary assistance, simplified text options, or language-comprehension tools.

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

The materials provide multiple options for students to demonstrate understanding of mathematical concepts through the Perform–Express–Represent (PER) framework. Perform: Students show understanding by manipulating objects, solving problems, or executing procedures. Express: Students explain their thinking orally, in writing, or through other forms of communication. Represent: Students demonstrate knowledge by creating models, diagrams, charts, graphs, equations, or other visual representations.

Educator guidance supports diverse demonstrations of understanding, encouraging explanations, peer collaboration, and structured talk or partner activities.

Each lesson includes an Exit Ticket that prompts students to use various strategies to showcase their learning.

This guidance ensures educators can accommodate different learning styles and assess a wide range of student responses effectively.

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	Materials do not include direction for educators on when to use each intervention, how to implement it effectively, or how to monitor student progress.	2/3
3.2d	All criteria for guidance met.	2/2
3.2e	Materials do not include guidance, prompts, or support for providing timely or meaningful feedback during lesson delivery.	0/2
—	**TOTAL**	11/14

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

The materials include explicit prompts and guidance to activate prior knowledge before introducing new concepts. This is consistently embedded in a designated Activate Prior Knowledge section.

Lessons provide opportunities for students to connect prior learning to new mathematical ideas using hands-on activities, visual models, and discussions. For example, students may use base-10 blocks to understand multiplication or discuss geometric properties like acute, obtuse, and right angles.

The materials include educator prompts and guidance for scaffolding and building knowledge by highlighting and connecting key patterns, features, relationships, and big ideas through multiple forms of representation (e.g., place value, input-output tables, visual models).

Lessons are designed to bridge gaps between grade levels. For example, grade 4 lessons build on grade 3 concepts and progressively increasing rigor—from multiplying three-digit numbers by one-digit numbers to multiplying two-digit numbers by two-digit numbers using similar strategies.

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

Each lesson incorporates hands-on learning opportunities (e.g., using math tools like fraction strips) to promote self-discovery, peer discussions, and critical thinking. The materials emphasize student discourse, encouraging students to share reasoning through peer and whole-group discussions, written explanations, and mathematical conversations.

Teachers receive detailed, step-by-step lesson plans, with scripted explanations, suggested wording, open-ended questions, and discussion prompts to support effective facilitation. The materials also provide explicit guidance for using real-world connections to make math relevant to everyday situations.

Lessons balance explicit modeling, mathematical discourse, independent practice, and differentiation to build student confidence and deepen understanding.

Teachers are guided on when and how to transition between whole-group, small-group, and individual learning experiences to support diverse needs and promote knowledge building.

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

The materials provide multiple intervention methods for whole-group, small-group, and individual instruction to support struggling learners and Emergent Bilingual (EB) students.

A multi-tiered intervention structure offers support through teacher-led activities, peer collaboration, mathematical discourse, and small-group intervention tasks designed to assist students who need additional help with specific content.

Adaptive materials provide reports to help educators group students for targeted intervention or enrichment based on mastery of similar learning standards.

While the materials recommend small-group instruction and differentiation, they lack clear guidance on how to form groups, select appropriate activities, or target specific skills. Educators receive limited direction on when to apply each intervention, how to implement them effectively, or how to monitor student progress.

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

The materials include enrichment and extension activities that engage students in learning beyond routine practice through partner work, independent tasks, and digital resources.

Teacher guidance supports the implementation of these activities and promotes higher-order thinking, critical thinking, and mathematical discourse.

For example, the Fraction Decomposition Riddles activity challenges students to apply their understanding of fractions in creative ways while encouraging peer-to-peer engagement.

In another lesson on writing and solving equations with variables, students use a museum website to research admission costs and create equations to determine total group costs, promoting real-world connections and application of mathematical concepts.

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

The materials do not provide guidance on the types of feedback teachers should give to students during lessons and activities.

Lessons and activities lack suggestions for when to check for understanding or how to lead discussions that explore students' reasoning.

The materials do not include prompts or guidance for providing feedback during lesson delivery.

Online tools and platforms do not offer support for giving timely or meaningful feedback to students.

3.3 Support for Emergent Bilingual Students

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

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.3a	Materials do not include differentiated strategies across multiple proficiency levels of English language learners.	1/4
3.3b	This guidance is not applicable to the program.	N/A
3.3c	Materials do not include the English Language Proficiency Standards (ELPS) for all levels.	0/1
3.3d	Materials do not include oral language routines; they are limited or missing.	1/8
3.3e	This guidance is not applicable to the program.	N/A
—	**TOTAL**	2/13

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.

Sentence frames help students explain their thinking (e.g., "The number rounds to __ because the digit to the right is __," or "This shape is a __ because it has __.").

The materials offer general tips for supporting Striving Learners and Emergent Bilingual Learners, including vocabulary-building activities like flashcards and oral language practice.

EBL Tips are included throughout to support language development. While linguistic accommodations are provided for at least one level of language proficiency, the materials do not differentiate supports across multiple proficiency levels.

Linguistic accommodations are present for at least one level of language proficiency, but the materials do not differentiate supports across multiple proficiency 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.

The materials do not reference or support state-approved bilingual or ESL program models, such as dual language immersion or ESL pull-out.

Implementation guidance is limited, not clearly connected to the ELPS, and not designed to support English learners within specific instructional models.

The materials lack clear guidance for educators on effectively implementing them in state-approved bilingual or ESL programs.

While built-in supports for differentiation and language learners are included, they are not specific to language proficiency levels or program requirements.

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 provide guidance to support Emergent Bilingual (EB) students in developing academic vocabulary, including dedicated vocabulary introductions in the "Understand the TEKS" section of each lesson.

Supports include sentence stems, key term reviews, and the use of English-Spanish cognates (e.g., ounce/la onza, gallon/el galón) to reinforce vocabulary.

Written language development is supported, but oral language routines are limited or missing. The materials also lack embedded guidance for building background knowledge and making cross-linguistic connections through written and oral discourse.

Supports are generic, not differentiated by language proficiency level, and do not scaffold over time to promote progressive language development.

3.3e – If designed for dual language immersion (DLI) programs, materials include resources that outline opportunities to address metalinguistic transfer from English to the partner language.

This guidance is not applicable because the program is not designed for dual language immersion (DLI) programs.

4. Depth and Coherence of Key Concepts

Materials are designed to meet the rigor of the standards while connecting concepts within and across grade levels/courses.

4.1 Depth of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.1a	All criteria for guidance met.	2/2
4.1b	All criteria for guidance met.	4/4
—	**TOTAL**	6/6

4.1a – Practice opportunities throughout learning pathways (including instructional assessments) require students to demonstrate depth of understanding aligned to the TEKS.

The materials provide multiple opportunities for students to practice concepts and demonstrate depth of understanding aligned to the TEKS. Practice progresses from guided, scaffolded problems to independent tasks, increasing rigor and allowing students to show mastery.

In grade 4, Chapter 1 on representing whole numbers, students practice using a place value chart to identify digit values, write numbers in word form and expanded notation, solve problems with base-10 blocks, and explain expanded notation to peers.

Assessments in grade 4 include questions with charts, fill-in-the-blank, and multiple-choice formats that assess understanding of place value relationships (e.g., a digit being ten times or one-tenth of another) and expanded notation. Instructional assessments offer a range of question types—factual, conceptual, procedural, and metacognitive—to allow students to demonstrate mastery and deep understanding of the TEKS (p. 132).

Examples include Lesson 1 Exit Ticket and Lesson 1 Assessment.

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.

Lessons are structured to move from guided instruction to critical-thinking tasks, followed by assessments that evaluate conceptual understanding (e.g., p. 96). Tasks are scaffolded to build depth of knowledge, beginning with concrete objects, then transitioning to pictorial models, and finally to abstract problem-solving.

In grade 4, students deepen their understanding of place value by responding to questions such as, "What digit has one-tenth the place value of the digit 9's place value?" and engaging in increasingly complex tasks.

Enrichment and extension activities further challenge students. For example, in grade 4, Chapter 2, students compare large numbers through movement and later play an online game to order numbers from least to greatest. Higher-level thinking is fostered through scaffolded questions, such as identifying the steps in multi-step word problems or justifying the structure of geometric figures based on attributes.

Students are encouraged to apply reasoning and creativity by generating their own problems to challenge peers (e.g., explaining whether a rhombus can have one right angle). "Critical Thinking" lessons reinforce and extend previous concepts while integrating prerequisite TEKS to strengthen foundational skills and build academic stamina.

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	Materials do not include guidance for the procedures.	3/4
—	**TOTAL**	5/6

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

In grade 4, students use place value charts to add and subtract whole numbers up to 1,000, with tasks guiding them to connect composing and decomposing to regrouping. The materials provide educator prompts to deepen understanding of regrouping and place value, such as "Why do you sometimes need to regroup when adding?" and "Why do you sometimes need to regroup when subtracting?"

Decomposing fractions is presented with coherence across concepts and within the grade level, reinforcing connections to prior knowledge.

Students use strip diagrams and variables to represent and solve multistep problems, including building part-part-whole models to understand equations with unknowns.

Lesson Progression sections, such as in grade 4, Lesson 1, highlight connections to prior learning and support instructional coherence. "Building Stamina" lessons extend prior knowledge and reinforce key concepts through cumulative practice.

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

The materials include a Learning Progression at the beginning of each chapter and within lesson planners that shows how TEKS are taught before, during, and after the current grade level, supporting instructional coherence across concepts and grade bands.

In grade 4, the Learning Progression reminds teachers that students previously learned to compare and order whole numbers up to 100,000 and now extend that understanding to numbers up to 1,000,000,000.

The progression also connects to grade 5 concepts, such as comparing and ordering decimals, reinforcing the vertical alignment of place value understanding. Teachers can use the Learning Progression to identify concepts to reinforce during instruction and anticipate potential areas of student difficulty.

Lesson 1 in grade 4 explicitly highlights connections to prior learning, modeling how concepts build over time.

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

The materials consistently link prior knowledge to current learning, using familiar procedures and tools to support student understanding. Each lesson begins with activating prior knowledge, followed by guided instruction, practice, and critical-thinking tasks to extend learning and challenge advanced students.

The *Teacher Lesson Planner* provides explicit instructions on how to activate prior knowledge during lesson introductions. Lessons follow a clear instructional progression: activating prior knowledge → bridging concepts → transitioning to new learning.

For example, in grade 3, students begin by telling time to the minute on analog clocks, then progress to solving time intervals using those clocks, and finally apply additional strategies to solve elapsed time problems. "Critical Thinking" sections reinforce and extend prior lessons while integrating prerequisite TEKS from earlier grades, supporting learning continuity.

The curriculum is limited to grade-level concepts and does not introduce content from subsequent grades. Future grade-level concepts and procedures are not included in the scope.

4.3 Coherence and Variety of Practice

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.3a	Materials do not include a consistently integrated, spaced retrieval or spiraled review across regular lessons or throughout the learning pathways.	1/2
4.3b	Materials do not include a spiraling approach overall, focusing primarily on one concept or skill at a time without consistently revisiting or integrating earlier learning across pathways or units.	0/2
—	**TOTAL**	1/4

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

In grade 3, students learn place values up to 100,000 and later apply this understanding to compare, order, and round numbers. They are prompted to use concepts such as the value of each digit, place value charts, number lines, and the largest place value when comparing numbers.

The materials and assessments primarily focus on current grade-level content without routine review or reinforcement of previously learned skills or concepts. In grade 4, Lesson 1 explicitly highlights connections to prior learning within the Lesson Progression section, supporting instructional coherence.

The "Building Stamina" end-of-chapter assessments incorporate spaced retrieval opportunities, revisiting previously learned skills and concepts to promote long-term retention and deeper understanding.

Despite these targeted assessments, the materials do not provide consistent spaced retrieval or spiraled review opportunities across the entire learning pathway or in regular lessons.

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

The materials provide interleaved practice opportunities that allow students to apply previously learned skills alongside new content. For example, in grade 3, students practice place value up to 100,000 using grade 2 skills like base-10 blocks, place value charts, expanded form within 1,200, and concepts such as greater than, less than, and place value.

Assessments include a variety of problem types that integrate prerequisite and previously learned skills with new content. For instance, Lesson 2: "Critical Thinking" reinforces and extends concepts from earlier lessons while integrating prerequisite TEKS from prior grades.

Despite some interleaving in assessments, the materials follow a largely non-spiraling approach, focusing on one concept or skill at a time without consistently revisiting or integrating earlier learning across pathways or units.

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.

Examples include grade 3 students interpreting place value charts to understand the relationship between digits and analyzing models to write numbers in expanded form and notation.

In grade 4, students interpret hundredths grids to connect shading to fractions and decimals, aligning with TEKS 4.2G, though opportunities for comparing, critiquing, or deeper evaluation are limited. Grade 4 students also use strip diagrams to model and solve for unknown variables, analyzing diagram components as part of the process.

Lessons are structured to help students activate prior knowledge, build new skills, apply learning, and reflect on their understanding. Each lesson includes an Exit Ticket that prompts students to use various strategies to demonstrate understanding. The materials provide opportunities for students to interpret, analyze, and evaluate mathematical models and representations.

Educator guidance follows the Perform–Express–Represent (PER) framework. Perform: Students show understanding through actions like manipulating objects or solving problems. Express: Students explain their thinking verbally, in writing, or through other forms of communication. Represent: Students demonstrate understanding by creating models, diagrams, graphs, equations, or other visual tools. The PER framework provides educators with strategies to support diverse demonstrations of understanding, accommodate different learning styles, and assess student responses effectively.

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

The materials include questions and tasks that incorporate both concrete and pictorial models to support student understanding. Examples of concrete models include base-10 blocks, fraction tiles, counters, and fraction strips. Examples of pictorial models include number lines and place value charts, which are used to compare numbers or explain mathematical thinking.

In grade 4, Lesson 2, a Differentiation activity guides students to use base-10 blocks to model three numbers and then compare them starting with the largest place value. In the same lesson, students explain how to compare numbers to a classmate using a place value chart and academic vocabulary as part of the Learn Together activity.

Other tasks ask students to complete partially filled number tables and, optionally, to use counters to model input-output relationships.

Each lesson includes critical thinking opportunities that prompt students to use concrete and pictorial models to represent mathematical situations and real-world examples. Guided Instruction consistently integrates the use of models to support student learning.

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

The materials provide consistent opportunities for students to apply their conceptual understanding to new problems, real-world contexts, and unfamiliar situations through a variety of tasks and questions.

5.2 Development of Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.2a	Materials do not include a strong emphasis on building fluency or developing students' automaticity with basic computation skills.	0/2
5.2b	Materials do not include opportunities for students to be consistently given opportunities to apply different methods or choose the strategy that works best for them.	0/3
5.2c	Materials do not include opportunities for students to be consistently asked to choose between strategies, justify their reasoning, or explain which method is more efficient.	1/3
5.2d	All criteria for guidance met.	1/1
—	**TOTAL**	2/9

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

The materials do not place a strong emphasis on building fluency or developing students' automaticity with basic computation skills, which are essential for efficient problem-solving and long-term mathematical success.

They also lack tasks specifically designed to build the fluency and automaticity necessary to complete grade-level work.

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

The materials focus on students arriving at the correct answer but do not emphasize how they solved the problem or the efficiency of their method.

Although multiple strategies are introduced, students are not given opportunities to apply different methods or select the strategy that works best for them.

The materials provide practice with mathematical procedures but lack opportunities for students to revisit learning or connect concepts by choosing among strategies.

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

The materials provide some opportunities for students to evaluate accuracy. For example, in critical-thinking activities, students work with a partner to solve problems and explain their reasoning.

While some activities model accurate mathematical representations, students are not consistently given opportunities to evaluate the efficiency, flexibility, or accuracy of different strategies.

In several lessons, the teacher provides both the method and the answer, limiting student engagement in critical thinking, comparing approaches, or selecting strategies.

Although different representations (e.g., for fractions) are shown, students are not consistently asked to choose between them, justify their reasoning, or explain which method is more efficient.

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

Lessons guide teachers in introducing multiple strategies, such as using expanded form and expanded notation to represent numbers and connecting these strategies to multiplication, eventually introducing algorithms for multiplying larger whole numbers.

Students are supported in moving from concrete representations (e.g., identifying unshaded parts, using real-world examples) to abstract reasoning (e.g., decomposing improper fractions into unit fractions).

Some lessons prompt students to consider alternative methods, such as asking, "Could you have used the inner scale instead of the outer scale?" when measuring angles, encouraging flexible thinking.

While a progression of strategies is evident, the materials lack explicit prompts for students to compare approaches or select the most efficient method, limiting structured support for refining strategic decision-making.

5.3 Balance of Conceptual Understanding and Procedural Fluency

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

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

In grade 4, the materials guide students to use hands-on tools (e.g., base-10 blocks and place value charts), pictorial models, and abstract strategies to understand and solve decimal problems.

Key academic vocabulary is introduced and reinforced, particularly in lessons on angles and measurement. Teacher prompts and questions encourage mathematical thinking, but could be enhanced with more explanation of underlying concepts.

Students represent and solve multistep problems using the four operations with whole numbers, applying tools such as strip diagrams and equations with variables.

While the procedural focus is clear and well-supported, the materials provide limited emphasis on conceptual understanding (e.g., why angle measures matter or how a protractor functions).

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

Materials provide opportunities for students to use concrete, pictorial, and abstract models as required by the TEKS. Students use hands-on tools such as protractors to measure and draw angles, supporting concrete understanding of geometry concepts.

In grade 4, Lessons 9 and 10 on decimals guide students from concrete objects and pictorial models to abstract representations to build understanding of place value in whole numbers and decimals.

Pictorial models include diagrams and visual aids that label angles (e.g., ∠ABC) and illustrate correct protractor alignment and usage. Abstract models involve symbolic notation (e.g., ∠ABC), numerical angle measures (e.g., 45°), and procedural steps for solving problems.

Tasks also require students to use strip diagrams to model and solve problems involving unknown angle measures.

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

The materials support students in creating and using concrete and representational models to develop mathematical understanding. Lessons include critical-thinking tasks where students connect models to abstract concepts by creating and labeling their own diagrams and justifying their thinking.

In grade 4, Lesson 10, students model decimals using real-world examples (e.g., dividing a sandwich into six parts) and connect these models to abstract decimal values (e.g., the value of a penny).

Lessons guide students in transitioning from concrete tools (e.g., manipulatives and protractors) to representational models (e.g., labeled diagrams) and finally to abstract concepts (e.g., degree measures or decimal notation).

The materials promote a Perform–Express–Represent (PER) structure, encouraging students to act out, explain, and model their mathematical thinking. Students are encouraged to explain reasoning both orally and in writing, and to use diagrams, charts, or models to represent their thinking.

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.

Lessons include a variety of visual models (e.g., rows and columns, color-coded markers, pizza pieces, pie charts, number lines, strip diagrams) to support understanding of key mathematical concepts and vocabulary (e.g., array, area model, fraction, numerator, denominator, benchmark fraction).

The "Understand the TEKS" section guides vocabulary-rich discussions, introduces key terms in context, and supports concept development.

Sentence stems and frames are provided in each lesson, including EBL Tips, to help students explain their reasoning using academic mathematical language. Graphic organizers are included to support vocabulary acquisition and mathematical communication.

Students use strip diagrams and equations to represent and solve multistep problems involving all operations, applying terms like variable and unknown value to justify and communicate their solutions.

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.

Visuals and terms are reviewed at the beginning of lessons to support vocabulary development (e.g., in lessons on dividing whole numbers and writing equations). Sentence frames are provided to help students explain their thinking using precise mathematical language during peer and class discussions.

Students apply academic vocabulary in context through hands-on, real-world tasks (e.g., designing a fruit salad recipe using fractional amounts and explaining their reasoning).

Lessons include collaborative activities that prompt students to use and teach math vocabulary to peers, deepening understanding through discussion. Teacher guidance includes strategies such as "think-

alouds" to model how to translate word problems into strip diagrams and equations, emphasizing connections between models and mathematical terms.

Scaffolding tips for Striving Learners and Emergent Bilingual Learners are included in sidebars to support vocabulary development and comprehension. Lessons encourage the use of mathematical language in context, fostering communication between students and teachers.

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

The materials provide integrated support to help students apply and use academic mathematical vocabulary during discussions and problem-solving.

The "Understand the TEKS" section includes teacher guidance with prompts and exemplar responses to model appropriate use of mathematical language.

Guiding questions in sidebars (e.g., "What is a fraction?" and "Why does the denominator stay the same when you add or subtract fractions?") prompt students to explain and justify their thinking using precise vocabulary.

Vocabulary review prompts and contextual explanations are embedded in lessons to support understanding of key terms. Lessons consistently include opportunities for students to use and refine mathematical vocabulary during guided instruction and collaborative discussions.

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

Lessons prompt educators to ask guiding questions (e.g., "What does the remainder mean in this problem?" or "What is another way you could have found the perimeter?") to encourage explanation and justification of thinking.

Built-in prompts in the "Learn Together" activities encourage students to use lesson vocabulary and teach concepts to peers, reinforcing understanding through discussion. Students engage in meaningful math conversations by working in small groups to solve real-world problems, explain their thinking, and share strategies.

Example tasks include swapping problems with peers, solving them, and discussing solutions to promote collaborative reasoning and communication. The materials support the use of precise academic language during discussions about mathematical operations, concepts, and problem-solving strategies.

Embedded guidance helps teachers promote peer-to-peer discourse on key concepts such as area, perimeter, multiplication, division, and fractions. Guided discourse questions are used to build

conceptual understanding and engage students in reasoning aligned with the Mathematical Process Standards.

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.

Lessons include open-ended questions, challenge tasks, and opportunities for student-generated models and explanations to encourage diverse reasoning and expression.

Common misconceptions are explicitly identified in lessons, along with targeted teacher prompts and clarifying hints to guide students toward correct understanding (e.g., regrouping errors or misapplying formulas for area and perimeter).

Example prompts include questions such as, "Why do you need to regroup in the tens column but not in the ones column?" with model student responses provided to support teacher facilitation.

Materials offer corrective strategies for frequent errors (e.g., "Remind students they need to add all four side lengths" when finding perimeter).

5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	Materials do not include material showing that it is connected throughout the learning pathways.	1/2
5.5c	All criteria for guidance met.	1/1
—	**TOTAL**	3/4

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

Students use concrete (e.g., base-10 blocks), pictorial (e.g., place value charts, circle diagrams, number lines), and abstract representations to build understanding before applying formal algorithms.

Lessons guide students to model and solve real-world math problems, such as adding and subtracting whole numbers and fractions, using appropriate tools and representations.

Students are encouraged to justify their thinking and explain problem-solving methods with precise mathematical language, supported by sentence frames (e.g., "The sum of 7 twelfths and 4 twelfths is 11 twelfths").

Educator prompts and guided questions support students in selecting and justifying strategies (e.g., using a protractor or benchmark angles to measure). Students organize their mathematical ideas and communicate clearly, aligning with TEKS expectations for mathematical processes.

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

In grade 5, the materials incorporate TEKS Mathematical Process Standards within individual lessons through tasks that emphasize problem-solving, reasoning, and communication. Each Lesson Planner lists Mathematical Processes using clear "Students will..." statements (e.g., "Students will look for how numbers and ideas go together to better understand and explain math").

The materials include descriptions and tables showing how Mathematical Process Standards are addressed in each lesson, helping educators understand what students should be able to do by the end.

Students are encouraged to model thinking, analyze relationships, and explain their reasoning clearly throughout lessons.

However, there is limited explicit guidance on how process standards are systematically connected across lessons or units, which may limit educators' ability to support skill development over time in a cohesive and structured way.

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

The materials include a Lesson Correlation chart that lists which mathematical process standards (e.g., 4.1B, 4.1C, 4.1E) are addressed in each lesson.

Each lesson begins with a Lesson Planner that identifies the specific TEKS content and process standards covered. The materials provide tables and overviews to help educators understand how TEKS process standards are integrated into instruction.

Guided questions, models, and real-world tasks are used throughout lessons to engage students in problem-solving, reasoning, and mathematical communication aligned with process standards such as 4.1B and 4.1E.

Students use visual models (e.g., number lines, circle diagrams) to solve problems, justify solutions, and organize their thinking. Sentence frames are included to help students explain their reasoning clearly, supporting development of mathematical language and communication.

6. Productive Struggle

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

6.1 Student Self-Efficacy

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

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

Grade 4 materials provide consistent opportunities for students to think mathematically and persevere through problem solving. Students are encouraged to explain their reasoning, reflect on errors, and explore multiple solution strategies (e.g., "What is another way you could have found the perimeter?").

Lessons prompt students to make sense of mathematics through real-world problems, such as comparing data in a penny-collecting contest, or decomposing numbers in different ways.

Instruction includes scaffolded questions, Guided Instruction prompts, and structured partner discussions to support problem solving and conceptual understanding. Educator prompts help students analyze multistep problems and determine appropriate strategies (e.g., "Why is this a multistep problem? What do you need to solve first?").

Materials support the development of deep understanding by connecting visual models to symbolic notation, particularly in lessons on fractions. Students use visual representations, equations, and real-world examples to compare fractions, solve equations with variables, and distinguish between area and perimeter.

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

Lessons include Think–Pair–Share activities and structured prompts (e.g., "Will you use a different process when the numbers in a problem are greater than 100?") to foster mathematical reasoning and strategic thinking.

Students are encouraged to explain and justify their chosen methods through partner talk, small-group discussions, and group presentations. Activities promote checking peer understanding and discussing the validity of different approaches to build confidence and critical thinking.

The materials provide sentence frames and guiding questions to promote clear mathematical communication and reflection (e.g., "What step do you need to take first? Why is this a multistep problem?").

Students compare different models and solution paths to deepen conceptual understanding and develop flexible problem-solving skills. Some lessons use a Perform–Express–Repeat structure to reinforce learning through multiple modes of expression.

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.

Lessons include teacher prompts to spark mathematical discussion (e.g., "If a word problem asks you to find how many full groups can be made and how many are left over, how would you solve it?").

Critical-thinking tasks require students to write and explain their reasoning for real-world math problems (e.g., determining if 12 boxes are enough for 76 snacks packed in groups of 6). Writing activities ask students to create and solve math problems, explain their strategies using mathematical vocabulary, and reflect on their reasoning.

Students work in small groups on hands-on tasks, such as building and comparing fraction models, to promote active exploration and concept development. Partner talk, Think-Pair-Share, and whole-class discussions help students share strategies, justify solutions, and clarify understanding.

The materials support peer teaching, shared reasoning, and structured discourse to reinforce mathematical thinking and communication. Lessons provide multiple ways for students to demonstrate learning through writing, speaking, modeling, and collaborative tasks (e.g., "Learn Together" structures and guided discourse questions).

6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	All criteria for guidance met.	6/6
6.2b	Materials do not include prompts and guidance to support educators in providing explanatory feedback based on student responses.	2/4
—	**TOTAL**	8/10

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

Grade 4 materials include prompts and structured opportunities for students to share and reflect on their problem-solving approaches. Lessons encourage students to explain their reasoning aloud and in writing (e.g., "Explain aloud how you could write the number 1,880,153 using expanded notation. Write your explanation below.").

Educators are supported with Guided Instruction prompts and follow-up questions to facilitate student reflection and justification of strategies.

Students share problem-solving approaches through partner talk, group presentations, and whole-class discussions, using mathematical vocabulary to explain their reasoning. The materials include tasks where students use models, common denominators, and number lines to compare fractions and argue which is greater or less.

Students are guided to justify their methods by comparing strategies and evaluating the validity of different approaches. Reflection is promoted through error analysis, revising strategies, and reconsidering problem-solving methods during group work.

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

Grade 3 materials include prompts and supports for educators to provide explanatory feedback based on anticipated student misconceptions. Built-in prompts and visual tools help address misconceptions, such as misinterpreting rows and columns in arrays or counting incorrectly on number lines.

Common errors and hints are embedded in practice activities (e.g., confusing the numerator and denominator in unit fractions), helping teachers guide students toward correct reasoning.

However, the materials do not offer embedded prompts or guidance to support teachers in delivering explanatory feedback tailored to student responses. They also do not equip educators with strategies or sample responses to address common student misconceptions or extend student thinking.