Accelerate Learning Inc.

Spanish Mathematics, 4

STEMscopes Texas Math–Grade 4 Spanish

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Full-Subject, Tier-1	**9798893533736**	**Both Print and Digital**	**Static**

Rating Overview

TEKS SCORE	ELPS SCORE	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	N/A	170	Flags Addressed	Flags in Report	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	26 out of 26	100%
2. Progress Monitoring	26 out of 26	100%
3. Supports for All Learners	25 out of 25	100%
4. Depth and Coherence of Key Concepts	19 out of 19	100%
5. Balance of Conceptual and Procedural Understanding	41 out of 41	100%
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	0	0	0
2. Alignment with Public Education's Constitutional Goal	0	0	0
3. Parental Rights and Responsibilities	0	0	0
4. Prohibition on Forced Political Activity	0	0	0
5. Protecting Children's Innocence	0	0	0
6. Promoting Sexual Risk Avoidance	0	0	0
7. Compliance with the Children's Internet Protection Act (CIPA)	1	0	0

SUITABILITY EXCELLENCE FLAGS BY CATEGORY	IMRA REVIEWERS
Category 2: Alignment with Public Education's Constitutional Goal	3
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.	3/3
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**	11/11

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

The grade 4 materials include a "Scope and Sequence" that clearly outlines the TEKS and Mathematical Process Standards and how concepts are taught throughout the year. For example, the "Properties of Two-dimensional Figures" Scopes begin with symmetry and then classify triangles, lines, and angles. The "Curriculum Design" section also includes the "Scope and Sequence" document, which details the order of TEKS to be taught and the alignment to the standards.

The "Implementation Guide" includes a chart showing the scope of connections between major mathematical topics and the TEKS throughout the instructional year. The "Course Rationale" gives an overview of the TEKS covered. For example, it lists concepts such as Place Value of Whole Numbers along with the corresponding TEKS 4.2A, 4.2B.

The "Teacher Toolbox" section offers an "Additional Texas Alignments" link to a document that outlines the TEKS for each to show alignment between instructional content and standards.

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 4 materials provide a year-long "Scope and Sequence" that outlines the specific number of instructional days allocated to each unit and TEKS. The "Scope and Sequence" document includes suggested pacing guidance for each mathematical concept. For example, the standard "Compare and Order Numbers" suggests six instructional days to support lesson planning.

The materials included in the "Pacing Guide" provide an overview of the content standards covered throughout the academic year, including explicit day counts for each unit or concept. This pacing is further supported by a "Scope Calendar" that integrates planning resources, practice opportunities, and assessment options, enabling teachers to monitor progress and adjust instruction as needed. The suggested pacing for each topic is consistent with the TEKS and helps ensure that all required content is taught within the academic year.

Various "Instructional Calendar" options outline how to adjust the number of instructional days based on district calendars, highlighting either 165 or 180 days. The options suggest that teachers modify the pacing by adding or removing activities to meet different scheduling needs. This adaptability ensures the effective use of materials across diverse instructional contexts while preserving alignment to the TEKS and supporting a coherent sequence of learning.

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 grade 4 materials include a "Teacher Toolbox" that includes a "Course Rationale" showing learning progression. For example, the sequence begins with the place value of whole numbers as a foundation for understanding number relationships. The materials explain the progression, outline the purpose of each unit, and outline how the sequence supports connections to past and future learning. The "Course Rationale" outlines the focus areas of the materials, their sequencing, and their correlation with the TEKS.

In the "Teacher Toolbox," the "Implementation Guide" includes a table with the progression within and across content. For example, the information states, "Instructional time will be focused on four areas . . . the areas of focus emphasize the connections among the major mathematical topics throughout the instructional year," and explains how concepts will be learned and connected throughout the course.

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

The grade 4 materials provide evidence of structured teacher support for effective unit preparation. In each scope, the "Content Support" section outlines key components such as content standards, mathematical process skills, unit vocabulary, background knowledge, and common misconceptions. For example, in the "Addition and Subtraction Algorithms" unit, the "Content Support" gives teachers an overview of student learning goals and obstacles to support planning and lesson internalization.

The materials include tools for teachers to understand how content progresses within and across units. In the "Place Value of Whole Numbers" unit, the "Teacher Guide" includes a lesson sequence, TEKS alignment, and a breakdown of each instructional component. Each scope includes a "Content Unwrapped" section that supports the standards, unit objectives, and assessment focus. This structure ensures alignment between instruction and expected student outcomes.

Materials embed hands-on opportunities and real-world scenarios to reinforce conceptual understanding. For example, the grade 4 materials incorporate videos and collaborative problem-solving tasks that allow students to engage in productive struggle and repeat key steps in group settings. These experiences strengthen student engagement and retention through active participation and peer interaction.

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

The grade 4 materials provide evidence of structured support for teachers to guide math instruction. In the "Curriculum Design" section, the "Implementation Guide" includes the section "Administration and Instructional Coaches Support" with tools such as "Scope and Sequence," "Planning Guides," and "Teacher Preparation" resources. These tools help align instruction with program goals.

The "Implementation Guide" outlines best practices in the "Teacher Toolbox" section, including planning recommendations and instructional strategies. For example, the "Teacher Preparation and Planning Guidance" section in each unit offers support for lesson internalization. This guidance ensures teachers understand the content progression to deliver aligned lessons.

The "Advocating Best Practices" section provides teachers with research-based strategies to support fluency and instructional consistency. By using real-time resources such as suggested calendars and scheduling tools, teachers ensure daily fluency routines are incorporated into the instruction.

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.

Each scope outlines essential background knowledge from previous years, helping teachers understand how learning builds on new learning.

The material includes the academic vocabulary necessary to teach the unit concepts effectively. In grade 4, the unit's "Terms to Know" sections include the vocabulary and definitions of key concepts, such as *base ten*, *standard form*, *billions*, etc. The material includes a visual vocabulary with definitions to help students understand unit concepts and develop a deeper understanding of the academic vocabulary. In grade 4, the "Picture Vocabulary" for the unit provides visual representations and definitions of key terms, such as base ten blocks and place value relationships.

In the "Engage" section of each unit, the materials provide an overview of previously taught concepts and strategies. The "Engage" section of the "Angles" unit includes "Accessing Prior Knowledge." This part outlines an activity that describes the necessary materials, preparation, and procedures for teachers to assess students' background knowledge relevant to the topic covered within the unit.

The "Explain" section of each unit contains materials designed for students to use their linguistic and cultural background knowledge to enhance their understanding of vocabulary and concepts. The unit includes differentiated activities tailored to each language domain based on the students' proficiency levels: beginners, intermediate, and advanced.

The grade 4 materials include evidence of comprehensive unit overviews that provide background content knowledge necessary to effectively teach concepts in the unit. For example, the "Content Support" section of the unit "Compare and Order Numbers" describes background knowledge students should have before grade 4. The grade 4 materials include evidence of comprehensive unit overviews that provide the academic vocabulary necessary to effectively teach concepts in the unit. For example, the "Content Support" section of "Compare and Order Numbers" outlines "Terms to Know" with the vocabulary necessary in this unit.

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

Each Scope includes a take-home letter with the concepts students are learning in class and offers a selection of activities to reinforce those concepts at home. In grade 4, Scope 4.2ab, the take-home letter includes an example of the relationship between place values, giving the correct answer to the family to facilitate the extra practice at home.

Materials include a list of academic vocabulary used in the unit for families to reinforce with their students at home. For example, in grade 4, Scope 4.2, the "Take Home Letter" includes a list of concepts in Spanish, such as place value, digit, number, and position, to facilitate families' understanding of the concepts taught in the classroom.

In the "Home" section of each unit, materials include a section titled "Take Home Letter" in English; this letter includes "A breakdown of the concepts the student is learning in class to practice the concepts at home." For instance, in the unit "Angles," students at home can practice solving problems involving adjacent angles, including angles that are complementary (total 90°) or supplementary (total 180°). Each grade 4 unit's home section includes a "Take Home Letter" in Spanish. This letter explains the concepts the student is learning in class to facilitate practicing mathematical terms in Spanish at home. In the "Area and Perimeter" unit, students can practice terms like *longitude*, *perimeter*, and *rectangular* with familial support.

The grade 4 materials include evidence of support for families in English for each unit, with suggestions on how to support their students' progress. The "Division Models and Strategies" unit in the grade 4 "Scopes" section includes a "Take Home Letter" in English that outlines information about the unit as well as activities to try at home to reinforce new learning. The grade 4 materials include evidence of support for families in Spanish for each unit, with suggestions on supporting their students' progress. The "Division Models and Strategies" unit in the grade 4 "Scopes" section includes a "Take Home Letter" in Spanish, which outlines information about the unit as well as activities to try at home and reinforce new learning.

1.3 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.3a	All criteria for guidance met.	7/7
1.3b	All criteria for guidance met.	3/3
1.3c	All criteria for guidance met.	1/1
—	**TOTAL**	11/11

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).

Each daily lesson includes a list of materials the teacher needs to effectively teach each component, as well as materials the student needs to participate in the lesson. The "Suggested Scope Calendar" outlines the timing for each lesson.

The grade 4 Scope includes a "Foundation Builder" within the "Engage" section. This part contains a description of the corresponding unit, required materials, preparation steps, and procedures listing teacher and student materials necessary to deliver the lesson effectively.

All grade 4 units, such as "Place Value of Whole Numbers," provide a scope calendar, including daily manipulatives and materials for each lesson. The materials offer guidance and recommendations regarding the timing of lesson components, such as the duration allocated for whole-group instruction, small-group activities, independent practice, and assessment options.

The grade 4 materials demonstrate evidence of teacher and student materials necessary to effectively deliver the lesson. For example, in the "Angles" unit in grade 4, the "Elaborate" tab includes the activity "Fluency Builder—Problem Solving with Angles." This activity includes information for the teacher, listing materials needed for that lesson for students, and a "Preparation" section aimed at supporting the teacher in preparing the materials for the lesson. The grade 4 materials include evidence of suggested timing for each lesson component. For example, through the "Angles" unit, the "Suggested Scope Calendar" has a breakdown of each day of the unit. Within that breakdown, there is a suggested pacing of the lesson, such as Day 3, which suggests 5–10 minutes for the Warm-Up Options, 45–60 minutes for the Whole Group, 15–30 minutes for the Small Group, and 5–15 minutes for Assessment Options.

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.

Each daily lesson includes a list of materials the teacher will need to effectively teach each component, and materials the student will need to participate in the lesson. The "Suggested Scope Calendar" outlines the timing for each lesson.

The grade 4 Scope includes a "Foundation Builder" within the "Engage" section. This part contains a description of the corresponding unit, required materials, preparation steps, and procedures listing teacher and student materials necessary to deliver the lesson effectively.

For all grade 4 units, such as "Place Value of Whole Numbers," a scope calendar is provided, which includes daily manipulatives and materials for each lesson. The materials offer guidance and recommendations regarding the timing of lesson components, such as the duration allocated for whole-group instruction, small-group activities, independent practice, and assessment options.

The grade 4 materials demonstrate evidence of teacher and student materials necessary to deliver the lesson effectively. For example, in the "Angles" unit in grade 4, in the "Elaborate" tab, the activity "Fluency Builder—Problem-Solving with Angles" includes information for the teacher that lists materials needed for that lesson for students, as well as a "Preparation" section aimed at supporting the teacher in preparing the materials for the lesson. The grade 4 materials include evidence of suggested timing for each lesson component. For example, through the "Angles" unit, the "Suggested Scope Calendar" has a breakdown of each day of the unit. Within that breakdown, there is a suggested pacing of the lesson, such as Day 3, which suggests 5–10 minutes for the Warm-Up Options, 45–60 minutes for the Whole Group, 15–30 minutes for the Small Group, and 5–15 minutes for the Assessment Options.

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

Each scope contains an "Intervention" tab with activities and materials to support students requiring additional assistance. There is also an "Acceleration" tab with activities and materials designed to deepen understanding for students who have mastered the content.

Scopes include materials with an acceleration component to engage students in activities to deepen their understanding of the content and its applications. Each unit has a "Create Your Own Activity," an open-ended task for newly acquired skills. The scopes include materials with an "Elaborate" tab with activities. Each unit contains a "Fluency Builder" consisting of independent and partner games and other activities that allow students to practice the new concepts.

In the grade 4 materials, each unit includes a "Scaffolded Instruction Guide" that gives guidance on the effective use of lesson materials for extended practice. The "Number Patterns" unit has information on

what materials can be used based on student data and performance. For students who are at 80–100 percent, there are six different suggested activities for extension. In the grade 4 materials, each unit includes a section titled "Acceleration" that gives guidance on the effective use of lesson materials for extended practice. The "Acceleration" tab in the "Number Patterns" unit includes several activities with descriptions for teachers that can be used as an extension of student learning in that unit.

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.	9/9
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**	21/21

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 grade 4 materials provide structured, standards-based instruction supported by a "Suggested Scope Calendar" and "Embedded Assessment" tools. Each scope begins with an Engage tab that activates prior knowledge through targeted activities designed to identify students' conceptual understanding. Lessons integrate diagnostic, formative, and summative assessments aligned with the TEKS. Instructional tasks vary by scope and include movement-based activities, such as ordering city populations in Scope 4.2C, to support conceptual development.

Formative assessments occur throughout each scope and include exit tickets, open-ended "Decide and Defend" tasks, and independent "Show What You Know" practices, such as analyzing and categorizing lines and points in Scope 4.6A. Each unit includes a "Skills Quiz" to assess fluency and a Decide and Defend assessment that promotes mathematical reasoning with evidence.

Diagnostic tools are present at the unit level through "Accessing Prior Knowledge," "Foundation Builder," and "Hook" sections, which use open-ended questions, problem-solving, and real-world applications to gauge readiness. Lessons embed formative assessments such as observation checklists and varied questioning strategies, exemplified on Day 3 of the "Addition and Subtraction Algorithms" unit. Summative assessments are present in lesson and unit "Evaluate" sections and include standards-based items, multiple-choice, open-ended tasks, and technology-enhanced questions that measure mastery.

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

The grade 4 instructional materials align with expectations by embedding diagnostic, formative, and summative assessments purposefully throughout each unit to inform instruction and support student learning. Pre-assessment tools, such as those found under the "Accessing Prior Knowledge" section of the "Scope Overview," provide teachers with data on students' prior mastery and misconceptions. For example, in the "Evaluate" section of the grade 4 "Compare Fractions" unit, the "Skills Quiz" is labeled as summative and used to determine mastery through multiple-choice questions, clearly identifying its function and purpose within the instructional cycle.

Each unit's "Suggested Scope Calendar" supports planning by outlining the assessment schedule and listing each tool by type—diagnostic, formative, or summative—along with its intended use. The "Teacher Guide" in the "Scope Overview" further defines these categories and connects each one to its corresponding assessment, such as observation checklists and "Decide and Defend "tasks. These checklists serve as formative assessments, and teachers use them to monitor progress, identify learning gaps, and encourage student reflection. For instance, in grade 4 scope 4.3ABEF, the observation checklist in the fractions lesson enables teachers to pinpoint misconceptions while supporting students in evaluating their understanding and setting personal learning goals.

The "Evaluate" sections across units, such as in grade 4 "Area and Perimeter and Place Value," provide clear descriptions of assessment types and procedural guidance. These sections include materials preparation, implementation tips, and precise explanations of each assessment's function. This structure ensures that teachers apply assessments effectively and that students engage in meaningful evaluation of their learning, with clearly stated purposes enhancing both teacher decision-making and student ownership.

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

The grade 4 instructional materials align with expectations by embedding assessment tools with clear guidance to ensure accurate, consistent implementation that supports instructional decision-making. Teachers receive structured support through resources that outline background knowledge, common misconceptions, scope content, and facilitation points, equipping them to administer each assessment with fidelity. To promote alignment and student understanding, materials such as the "Anchor Chart" and "Student Journal" guide assessment discussions and ensure that tasks reflect the intended learning outcomes. Together, these tools provide a coherent framework for evaluating student progress and supporting equitable instructional practices across assessment types.

Materials integrate formative assessments with detailed guidance to evaluate student understanding and adjust instruction accordingly. In scope 4.2AB, the Decide and Defend task includes a clear purpose, a

materials list, preparation steps, a rubric for scoring, and facilitation tips to ensure alignment with instructional goals. The "Show What You Know" assessment within the same scope is divided into two sections, enabling teachers to pinpoint learning gaps and plan targeted interventions.

Procedural guidance supports summative assessments to maintain consistency and reliability. On Day 13 of the "Division Model Strategies" unit, the "Suggested Scope Calendar" links to a standards-based assessment and the Decide and Defend task, each accompanied by detailed instructions for administration. Similarly, in the "Area and Perimeter" unit, Day 7 offers two assessment options, "Decide and Defend," and a standards-based task—both timed and supported by preparation notes and facilitation strategies.

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

The grade 4 instructional materials align with standards by embedding diagnostic, formative, and summative assessments that directly support the TEKS and the objectives of each lesson, unit, and course. Diagnostic assessments, such as the "Observation Checklist" in the "Suggested Scope" section of the "Place Value of Whole Numbers" unit, are structured around relevant standards and skills. Similarly, the "Number Patterns" unit includes a diagnostic checklist that identifies the standard and key concept while offering space for observation, ensuring alignment and instructional relevance.

Formative assessments are intentionally connected to daily objectives and unit goals. In Scope 4.4A, the "Show What You Know—Part 1: Add Decimals" task under the Explain tab targets standard 4.4A and evaluates students' ability to add and subtract decimals using the standard algorithm. The "Exit Ticket" recommended on Day 5 of the "Division Models and Strategies" unit (4.4EFGH) further supports this alignment by providing a focused opportunity to gauge student understanding of the day's lesson.

Summative assessments are designed to measure mastery of TEKS-based objectives through varied formats. In Scope 4.6A, the Decide and Defend task assesses student understanding of geometric relationships by requiring justification and application of mathematical vocabulary in a real-world context. The "Place Value of Whole Numbers" unit includes a "Standards-Based Assessment" in the "Evaluate" section, directly addressing TEKS 4.2A and 4.2B. Likewise, the "Division Models and Strategies" unit provides a summative assessment aligned with its targeted standards, confirming mastery at the close of instruction. Each assessment type is embedded with purposeful design to ensure alignment, clarity, and instructional utility across the curriculum.

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

Grade 4 materials embed a range of instructional assessments aligned to the TEKS and designed to measure student understanding at varying levels of complexity. The assessments include multiple-choice,

text-entry, open-response, and technology-enhanced items such as drag-and-drop, hotspot, and inline choice, which support varied demonstrations of knowledge.

Each scope provides access to pre-, mid-, and post-assessments through the "Assessments tab and Evaluate" section. For example, scope 4.4A includes a Standards-Based Assessment that evaluates mastery of addition and subtraction of whole numbers and decimals to the hundredths place using a variety of item formats. The Texas Math grade 4 mid-assessment features a combination of 24 multiple-choice, five fill-in-the-blank, and four multiple-answer items, all aligned to the TEKS and reflecting diverse levels of difficulty.

Units such as "Profit, Budgets, and Banking" and "Area and Perimeter" include assessments that blend procedural tasks and higher-order thinking. These assessments, including DOK-2 level items, offer open-ended responses and inline choices. In the "Compare and Order Numbers" unit, students engage with written responses, multiple response formats, and inline selections that target different cognitive demands. Benchmarks and Standards-Based Assessments provide structured opportunities to evaluate student progress across both current and prior-grade standards with rigor and alignment to the course objectives.

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.

In grade 4, aligned instructional materials include assessment tools that provide structured guidance for interpreting student performance and planning the next instructional steps. The "Observation Checklist" from Scope 4.4BCDGH offers a flexible, real-time tool for evaluating student understanding of multiplication concepts. The checklist aligns directly with specific TEKS standards, enabling teachers to observe and document key skills while using anecdotal notes and multiple forms of evidence to support diverse learners.

The "Scaffolded Instruction Guide," found in any scope's "Home Guide" and units such as "Multiplication Models and Strategies" or Area and Perimeter, enables teachers to analyze assessment results and determine the level of support or enrichment each student needs. The guide includes performance-based rubrics and organizes targeted instructional resources by both standard and percentile ranges, such as identifying students scoring between 25–50 percent on standard 4.5C for on-grade-level instruction with support.

Materials within the "Teacher Toolbox" under process standards further support the interpretation of assessments by emphasizing conceptual understanding and application. For instance, the "Perimeter and Area" unit clarifies that students must distinguish between the two concepts and apply them in real-world contexts. Additionally, short constructed-response tasks like the "Decide and Defend" assessment within the "Evaluate" section incorporate rubrics that guide teachers in identifying student needs in understanding, computation, or reasoning, reinforcing data-driven instructional decisions.

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

The grade 4 materials provide a comprehensive structure for assessing and responding to student performance, ensuring that instruction is tailored to individual needs. For example, the Scope 4.4BCDGH "Teacher Guide" emphasizes the use of assessment data to organize students into three groups: remediation, mastery, and extension. This organization allows teachers to provide targeted instruction with suggested resources, such as "Fluency Builder" for students needing additional support and "Problem-Based Tasks" for those demonstrating mastery. These strategies help address specific learning

gaps and guide students toward academic success through purposeful and responsive instructional tasks.

The "Scaffolded Instruction Guide" in scope 4.2C also supports teachers in identifying trends in student performance and provides targeted resources based on assessment data. The guide organizes resources by standard and performance levels, ensuring that activities match students' proficiency. This structure encourages participation in key lesson components like Hook, Explore, and Skills Quiz" ensuring that all students engage with essential standards. For instance, in the "Place Value of Whole Numbers" unit, the materials help teachers assess prior knowledge and address gaps through resources like the Foundation Builder, ensuring students are equipped with the foundational understanding needed before progressing with the lesson.

Additionally, the grade 4 materials include diagnostic assessments such as the "Accessing Prior Knowledge" activity in the "Engage" section. This task allows teachers to identify gaps in prior knowledge and make real-time adjustments to instruction. In the "Multiplication Models and Strategies" unit, students engage in open-ended assessments where they reason mathematically and justify their ideas. The associated "Teacher Toolbox" provides guidance for facilitating structured conversations and deciding the next steps based on student responses. The materials also suggest specific activities, such as Foundation Builder, to fill gaps when students struggle with tasks, ensuring that instruction remains responsive to student needs and performance trends.

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

The 4th-grade materials offer tools to support both teacher and student progress monitoring, fostering greater engagement and ownership of the learning process. In Scope 4.4BCDGH, the "Heat Map" visual tracking tool links quiz questions to specific standards, offering a quick overview of student performance. This color-coded system allows teachers to identify areas needing remediation, review, or enrichment, helping to inform small-group interventions and instructional pacing. This tool enables teachers to track progress and make data-driven adjustments to instructional strategies.

In addition, the materials provide students with self-assessment opportunities, such as the Observation Checklist in Scope 4.2C. The rubric guides students to track their own growth by reflecting on their understanding and setting personal goals. For instance, in the "Add and Subtract Decimals" unit, the self-evaluation rubric prompts students to assess their grasp of key concepts, fostering self-reflection and helping teachers identify areas that require additional support. This combination of teacher and student tools encourages deeper engagement with the material and enhances student ownership of their learning journey.

Teachers also benefit from resources like the "Observation Checklist" in the "Represent and Compare Decimals" unit, where they can track student progress and make informed decisions about the next steps. The materials guide teachers to use observation data to tailor instruction, and encourage students

to reflect on their understanding and identify areas for improvement. This dual approach—where both teachers and students actively monitor progress—leads to a more personalized and responsive learning experience that supports continuous growth and development throughout the unit.

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.

The grade 4 materials include teacher guidance that supports differentiation. For example, the "Division Models and Strategies" unit includes small-group lessons where students use base-ten blocks and represent division problems with arrays, area models, the partial quotient strategy, and the standard algorithm to build understanding.

The Explore sections contain paired lessons that build on prior knowledge. For example, in Explore 1, students learn about symmetry using hands-on materials. In Explore 2 and Explore 3, students apply this understanding to classify triangle types and more complex shapes.

The materials reinforce learning through spiraled reviews and reteach opportunities embedded within the "Intervention" and "Elaborate" sections of units. For example, the "Angles" unit includes an Intervention tab with reteaching activities for students who have not reached proficiency in skills. In the "Elaborate" section of the "Place Value" unit, there is a spiraled review that builds proficiency in grade-level content.

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)

In grade 4, the instructional materials provide frequent, structured opportunities for students to engage in academic discussions with peers, supporting concept development through activities. These collaborative conversations are embedded within lessons, introducing new concepts, allowing students to verbalize their thinking and clarify understanding through dialogue. For example, the "Division Vocabulary" activity in the "Explain" section guides students to engage with key terms by using images

and rephrasing definitions. This structured interaction not only reinforces content but also supports language acquisition, particularly for emergent bilingual (EB) students, by encouraging rephrasing, personal connections, and visual associations.

The materials further strengthen vocabulary development through pre-teaching supports and embedded tools across all units. Visual strategies like anchor charts and vocabulary charts provide scaffolded learning experiences. In Scope 4.6BCD, teachers introduce terms such as symmetry and parallel lines before each lesson and co-construct an anchor chart with students using their drawings and examples. In the "Profit, Budgets, and Banking" unit, another anchor chart highlights financial vocabulary like *fixed* and *variable expenses*, and a vocabulary chart clarifies terminology by addressing possible student misconceptions and offering definitions in context.

Vocabulary instruction is further supported through contextualized pre-teaching activities that address potential misunderstandings. In the "Engage" section of the "Angles" unit, a vocabulary chart outlines student misconceptions and clarifies intended meanings for terms tied to multiplicative comparisons. The "Explain" section extends this support with a visual anchor chart highlighting grouping symbols and numerical expression structures. In the "Compare Fractions" unit, the "Engage" section features a "Foundation Builder" with a "Possible Preconceptions" chart to clarify terms such as *entero* by explaining its mathematical meaning and providing contextual examples. These strategies ensure students develop accurate vocabulary knowledge while allowing teachers to assess understanding and address gaps in real time.

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 grade 4 instructional materials provide students with enrichment and extension activities in grade-level content. For example, open-ended performance tasks, such as the Problem-Based Task, require students to apply math concepts to real-world scenarios, encouraging critical thinking and problem-solving beyond rote procedures. Additionally, "Math Thoughts" serves as a reflective tool, prompting students to explain their strategies and compare different approaches. These components function as formative assessments, offering insight into students' understanding and reasoning while reinforcing their ability to express mathematical ideas clearly.

To extend learning for students who have demonstrated proficiency, the materials provide structured enrichment through the Acceleration tab in each scope. For example, in Scope 4.6BCD, the "Choice Board" features tasks such as the "Graphic Designer" activity. In this project, students analyze how geometric shapes are used in professional logo design, explain their choices, and apply their knowledge in a visually and purposeful way, linking classroom learning to careers and the arts.

The materials also provide teachers with specific guidance for differentiated instruction based on student proficiency levels. The "Suggested Scope Calendar" identifies which students should complete activities such as Math Today." The Choice Board activity challenges students based on mastery of content. These activities integrate math with broader contexts. This consistent structure ensures all students are engaged in rigorous, purposeful tasks tailored to their learning needs.

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 grade 4 materials include guidance to support the teacher in modeling and explaining the concepts to be learned. The Explore 1 activity from the "Represent and Compare Decimals" unit includes explicit dialogue for the teacher to use, such as, "Help students access the task by asking the following guiding questions: What do you remember about base ten blocks and how they represent whole numbers?" and "Show students how to build a sculpture. Each sculpture should be built from 10 craft sticks and arranged as shown."

The Procedure and Facilitation Points in the lessons offer explicit prompts to support the teacher in modeling the concept to be learned. For example, the Explore 1 activity about elapsed time includes step-by-step directions that prompt teachers to model elapsed time using clocks and number lines while leading a discussion based on a real-world scenario. Materials support the teacher with clear steps, sample explanations, and guiding questions to help model and explain the concepts.

The "Compare Decimals" unit includes "Procedure and Facilitation Points" that provide guiding questions and example student responses to help the teacher connect new concepts to prior knowledge. In addition, the "Content Support" section for the unit presents potential misconceptions, visual aids for guidance, and exemplar models that all support the teacher in modeling and explaining the concepts to be learned.

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

The grade 4 materials include detailed teacher guidance for delivering lessons using multiple instructional approaches. In Scope 4.3ABEF–Explore 1, the Procedure and Facilitation Points include cooperative learning structures, hands-on modeling, math talk, and station-based activities that support group interaction and problem-solving.

The "Teacher Guide" provides teachers with the guidance and recommendations needed, providing clear instructional support and recommendations for effective lesson delivery and facilitation. It includes step-by-step guidance, facilitation prompts, and strategies to address misconceptions. The guide supports a

variety of instructional approaches—whole group, small group, intervention, and acceleration—and offers both digital and print formats to meet diverse teaching needs.

The "Instructional Supports" section provides prompts and modeling strategies to guide student thinking and discussion during real-world fraction tasks. For example, it provides detailed prompts and scaffolding strategies, including suggested sentence stems, guiding questions, and sample student responses to help teachers anticipate and address misconceptions. These supports equip teachers to facilitate meaningful academic discourse and deepen student understanding.

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 "Teacher Guide" includes multiple types of practice for effective implementation by providing structured opportunities for multiple types of practice, including guided, independent, and collaborative learning. Each lesson includes clear teacher guidance on how to implement these practices within a variety of instructional settings, such as whole group, small group, and individual instruction. The guide outlines when and how to use different strategies, such as hands-on activities, digital tasks, and skill practice, ensuring students engage meaningfully with content while teachers have the support needed for effective implementation.

The "Suggested Scope Calendar" offers guidance for transitioning between whole-group, small-group, and independent activities, and includes links to "Daily Numeracy" routines to structure math fluency practice. For example, activities such as estimating angles with student-made protractors and comparing decimals using visual aids demonstrate scaffolded learning structures. Materials include consistent support for transitioning between whole-group, small-group, and independent instruction.

In the Explore 1 lesson of the "Represent and Compare Decimals" unit, students have opportunities to work with teacher guidance, collaboratively in groups using various supports, or there are independent activities included. Throughout the lesson, there is guidance for the teacher, such as prompts and guiding questions to support implementation of the content.

3.3 Support for Emergent Bilingual Students

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

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.3a	This guidance is not applicable to the program.	N/A
3.3b	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**	9/9

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.

This guidance is not applicable because the Spanish program does not require guidance on providing linguistic accommodations.

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

The grade 4 instructional materials provide embedded implementation guidance to support teachers in bilingual/ESL programs. The "Scaffolded Instruction Guide" offers resources that outline key principles and strategies for language acquisition. Each lesson and unit includes interactive vocabulary and "Picture Vocabulary", sentence frames, graphic organizers, and practical tips for scaffolding content and language development.

The materials promote students' use of their native language and cultural knowledge to build understanding of math concepts. In Scopes 4.4ABEFGH and 4.3G, "Language Connections" activities include language scaffolds and differentiated support tailored to proficiency levels. In Scopes 4.2ABEFGH, students compare decimals through guided modeling, symbol use, and structured response formats. For example, the Explore 4 activity offers teacher support with guided questions, enabling students to express decimal comparisons using models, classroom discussion, symbolic representation, and sentence frames. These instructional supports are designed to scaffold both mathematics content and language development.

Comprehensive guidance is found in the "Curriculum Design and Essentials" sections through the "Teacher Toolbox." This guidance includes unit-specific TEKS, ELPS standards, and discourse instructions in both English and Spanish. Additional support is available in the "Launch into Grade 4" unit and the "Language Connections" informational video, which explains how to maintain grade-level math content while adjusting instructional language to meet EB learners' needs. For example, the video explains the purpose of "Language Connections": "to keep the math content on grade level while adjusting the language used to communicate with an English Language Learner." The video includes teacher-facing materials and instructional guidance that demonstrate how to meet the language needs of students at varying proficiency levels while maintaining academic rigor.

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 grade 4 instructional materials provide embedded support for EB students in developing academic vocabulary, improving comprehension, and making cross-linguistic connections. The "Charla de matemáticas," visual vocabulary, and teacher instructions include key terms for pre-teaching new vocabulary and provide an explicit routine. The materials emphasize the importance of close reading, particularly with word problems, and developing academic vocabulary. Various strategies for vocabulary building and comprehension are embedded, along with support for Spanish language proficiency. For example, during the introduction of new mathematical concepts such as fractions and decimals, key terms are pre-taught using visuals and sentence frames, enabling EB students to access and use precise mathematical language in context.

The materials include activities to support EB students in developing academic language through both oral and written discourse. For example, in Scope 4.2 ABEFGH, students engage in collaborative activities like "Analyzing Number Lines" to identify and label fractions and decimals. The "Teacher Toolbox" also provides the "Working With Words" activity to promote vocabulary development and cross-linguistic connections by highlighting similarities and differences between English and Spanish math terms, enabling students to use their home language as a resource for learning. Teachers receive clear guidance on how to implement the activity with differentiated supports based on students' language proficiency levels.

In the Explore lessons across units, the materials offer targeted guidance for students at different language proficiency levels. For instance, the "Language Supports" section in the "Area and Perimeter" unit emphasizes cognates like *área* and *perímetro* to build understanding. The materials also include opportunities for oral and written discourse, such as responding to open-ended questions, sharing answers, and receiving feedback. For example, materials guide teachers to explicitly discuss these linguistic similarities, helping students connect prior Spanish language knowledge to new English academic vocabulary. Activities in the "Student Journal" and tasks like "Students are asked, 'describe your

process of ordering numbers'" further support students' language development through both verbal and written expression.

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.

Grade 4 materials incorporate TEKS-aligned instructional tasks and assessments that require students to demonstrate depth of understanding throughout the lesson cycle, supporting accurate evaluation of proficiency and guiding instructional decisions. In Scope 4.2C, the Engage activity Accessing Background Knowledge uses population data from Texas cities to uncover prior knowledge and misconceptions, followed by Explore 1, Compare Numbers, where students compare whole numbers using relational symbols.

In the "Explain" section, the "Show What You Know: Part 1" task has students write comparison statements based on players' scores and use a place-value chart to order numbers, reinforcing conceptual understanding. The Elaborate task requires students to apply their learning by researching Texas college populations, while the "Evaluate" section's "Decide and Defend" prompts them to justify mathematical reasoning with evidence.

In the Explore portion of the "Expenses, Budget, and Banking" unit, students engage with an "Expenses, Profits, and Savings" chart in their journals, demonstrating the real-world application of financial literacy standards. Similarly, in the "Compare Fractions" unit, students complete a Skills Quiz that assesses fluency with key concepts. In the "Points, Lines, and Angles" unit, students explore constellations to identify geometric elements, then complete an Exit Ticket in Explore 2 to justify their understanding of line relationships, reflecting mastery of the TEKS through written reasoning.

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

The grade 4 materials present questions and tasks that progressively increase in rigor and align with the depth of understanding required by the TEKS. In Scope 4.5CD, students begin with foundational area and perimeter calculations, then use visual models in Explore 1 to derive formulas, and finally apply those formulas in real-world packaging design scenarios during Explore 2, building from procedural fluency to

applied reasoning. In Scope 4.3C and 4.3D, students use area models and number lines to compare fractions, represent equivalents with concrete manipulatives, and justify comparisons using benchmark fractions, transitioning from visual comparison to abstract justification.

The Explore section of the "Divide Fractions" unit offers hands-on, teacher-led activities where students represent dividing whole numbers by unit fractions, reinforcing reasoning through visual representation. The "Compare Fractions" unit builds rigor by moving from fraction circles to journal-based model creation and open-ended Exit Tickets that require justification.

In the "Explore Skills Basics" section, students begin with guided shading tasks and advance to constructing graphic organizers that compare fractions with different numerators and denominators, supported by teacher questioning that increases in complexity. The "Fluency Builder" in the "Division Models and Strategies" unit reinforces this progression through a card game where students take turns solving contextual division problems. These structured tasks support development toward grade-level proficiency by advancing conceptual understanding through strategic sequencing.

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 4 materials demonstrate coherence across units by explicitly linking mathematical concepts through consistent patterns and relationships that build over time. The "Course Rationale" outlines how major topics connect throughout the year, such as using place value understanding in multi-digit operations and extending that knowledge to concepts like comparing numbers and geometric reasoning. In Scope 4.2B, students begin with concrete models using manipulatives and place value charts to bridge foundational knowledge to more abstract reasoning, supporting their transition across content areas.

The "Home Tab Content Support" in Scope 4.2AB further emphasizes coherence by explaining how students' understanding of the base-ten system progresses from early counting strategies to more complex operations like multiplying and dividing by 10. The "Compare and Order Numbers" scope references prior learning in "Place Value of Whole Numbers," reinforcing this progression and explicitly listing 4.2B as a connecting standard.

In the Area and Perimeter scope, students apply prior operational knowledge to measure space, linking numerical reasoning to geometry. The "Growth Measurement Pre-Assessment" in the same scope includes a "Heat Map" that aligns student responses to specific standards, illustrating how past learning informs current instruction.

The "Rationale for Scope Order" explicitly describes how earlier scopes lay the foundation for later ones. For example, the materials state that understanding place value in the initial scope is essential for success in comparing numbers, which in turn supports broader numerical reasoning. This intentional sequencing allows students to deepen their understanding and see how mathematical concepts interrelate across the year.

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 grade 4 materials demonstrate coherence across units by intentionally linking prior knowledge, current objectives, and future expectations in both content and language. The Foundation Builder within

each lesson reinforces this connection by revisiting foundational concepts and academic vocabulary essential for new learning. For example, in Scope 4.2AB, the "Content Support" section builds on terms like *expanded form* and *place value*, first introduced in earlier grades. The section applies them to larger numbers, supporting deeper conceptual understanding.

The "Teacher Guide" in each scope outlines vertical alignment by clearly presenting the developmental progression of key standards. In the same scope, 4.2AB, the guide illustrates how place value skills develop from kindergarten through grade 5, ensuring continuity in instructional focus. The "Content Support's 'Coming Attractions'" further strengthens this alignment by previewing how concepts such as ordering decimals advance in grade 5, helping students and teachers anticipate future learning.

The "Angles" unit's "Content Unwrapped" section provides a vertical alignment chart that explicitly connects previous skills, like identifying right angles, to current grade-level tasks, while simultaneously previewing future expectations. Similarly, in the "Compare and Order Numbers Unit," the "What concrete words should students know?" section lists terms students encountered in earlier grades, such as *whole number* and *comparison symbol,* reinforcing consistent language use across years. These features, along with sentence stems and language frames, scaffold academic language to support student success across scopes, while maintaining conceptual and linguistic continuity aligned with TEKS.

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.

The grade 4 materials demonstrate coherence at the lesson level by purposefully connecting students' prior knowledge of concepts and procedures to new mathematical learning. Picture vocabulary, sentence stems, and real-world scenarios support academic language development and promote confidence in applying precise terms across lessons. In Scope 4.2C, the "Accessing Prior Knowledge" activity uses population data from Texas cities to help students revisit place value and number comparison, reinforcing foundational skills while setting the stage for new content. In Scope 4.2AB, students decompose numbers up to 100,000 into expanded form, drawing from earlier strategies to deepen their understanding of number structure.

The "Addition and Subtraction Algorithms" unit prompts students to solve within 1,000 using previously learned strategies, creating a bridge to the multi-digit computations taught later. In the "Multiplication Models and Strategies" unit, students begin by reviewing basic multiplication representations to prepare for more advanced tasks in the Explore phase. The "Area and Perimeter" unit builds on earlier learning by having students apply formulas introduced in the previous lesson, with facilitation questions like "¿Qué fórmula puede ayudarte a encontrar la información que necesitas?" guiding reflection and connections. Each Accessing Prior Knowledge activity intentionally activates previous learning, enabling students to engage meaningfully with grade-level tasks and demonstrate growth across assessment opportunities.

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 4 materials demonstrate coherence and support spaced retrieval by strategically designing lessons that revisit and reinforce previously learned content through varied assessment types, such as "Quick Checks," "Reviews," "Checkups," and "Interactive Skills Reviews." In Scope 4.2AB, students first convert numbers from word to numeral form and revisit this concept the following day by translating word form into expanded notation using numbers up to one billion, ensuring concept reinforcement across days. In Scope 4.2C, students compare and order whole numbers up to one billion by applying digit value understanding from earlier lessons, reinforcing their place value knowledge in new contexts.

The Explore 1 lesson in "Measured Elapsed Time" prompts students to solve time problems using geared clocks and number lines—methods introduced in grade 3—while "Scenario Cards" extend learning by asking students to model and share their strategies visually. This lesson offers both formative assessment and continuous skill application. In the "Area and Perimeter" unit, Explore 2, questions like "¿Cómo puedes determinar el área de una figura?" guide students to apply previously introduced formulas, reinforcing measurement reasoning.

The "Add and Subtract Decimals" unit extends understanding from the earlier Addition and Subtraction Algorithms scope by asking students to fluently add decimals through strategies they already know. Facilitation questions such as "¿En qué se parece sumar decimales a sumar números enteros?" directly prompt students to retrieve and apply earlier strategies, ensuring continued development of mathematical fluency across units and time.

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

The grade 4 materials incorporate interleaved practice through intentional spiraling of previously learned concepts within and across units, using varied assessment types to reinforce understanding. In Scope 4.2AB, students move between word, expanded, and standard forms to represent numbers, strengthening place value knowledge by requiring them to recall and apply strategies in multiple formats. Scope 4.5C and 4.5D build procedural fluency as students derive and apply formulas for perimeter and area using models, directly connecting to prior experiences with informal strategies from grade 3.

The "Points, Line, and Angle" unit supports knowledge retention through Interactive Notebooks, which students use during independent work and keep as cumulative records of learning. In the "Income, Taxes, and Payment Methods" unit, the "Abuela's Storage Closet" spiraled review prompts daily engagement with prior content through warm-ups or homework, guiding discussion that solidifies understanding. The Choice Board in the "Accelerate" section of the "Problem Solve Using the Four Operations" unit enables students to apply earlier strategies, such as estimation and diagramming, in real-world contexts. The "Elaborate" section of the same unit includes a spiraled review tied to previous scopes like "Multiplication and Division Models," reinforcing targeted TEKS through continuous, embedded interleaved practice.

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 grade 4 materials support conceptual application through structured modeling tasks. In Scope 4.2AB, Explore 1, students use place value disks and forms to represent and interpret whole numbers from real-world contexts. For example, the "Place Value" activity requires students to use place value disks, expanded form, and word form to interpret lottery checks. Students must translate visual models into standard numbers, reinforcing how digits represent value based on position.

In Scope 4.4BCDGH, students use arrays and area models to represent multiplication, explain its structure, and connect it to equations. The "Array and Area Model" lesson prompts students to solve multiplication problems by breaking them into parts using visual representations, then explaining the process through equations.

In the "Comparing Fractions" unit, students use pictorial models and number lines to justify comparisons in both structured and real-world contexts. For example, the "Foundation Builder" uses pictorial models, number lines, and real-world objects to compare fractions with numerators or denominators. The "Hook" activity, "Pizza Deliveries," presents contextual problems that require students to reason about unequal fractions using pictorial and symbolic models.

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

The grade 4 materials provide consistent opportunities for students to create models that represent mathematical situations. In Scope 4.4BCDGH, Explore 2 and Explore 3 Exit Tickets prompt students to construct visual representations, such as arrays and area models, to solve real-world multiplication problems. For example, students break apart numbers, label partial products, and write equations, helping them connect visual models to abstract mathematical concepts.

In the "Compare Fractions" unit, the "Explain and Explore" sections of the "Student Handout" ask students to create strip or circle models of fractions, write matching equations, and use reasoning to

justify equivalency. Tasks include modeling fractions with non-standard examples and answering guiding questions, such as how to divide shapes equally or how many lines are needed to partition a rectangle. These modeling activities ensure students use concrete strategies to deepen their understanding of fraction equivalence and comparison.

The "Engage" sections of the "Measurement and Compare Fractions" units also offer real-world tasks that reinforce the use of models. For instance, in "Making Fruit Punch," students convert liquid measurements using equivalent values presented in a table, and in the open-ended comparison activity, students show a strategy and create a model to compare fractions. These examples, found in the "Teacher Procedure," "Facilitation Points," and "Student Handouts," support the development of conceptual understanding through models.

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

The grade 4 materials consistently present students with questions and tasks that promote the application of conceptual understanding in new and varied problem contexts. In the "Number Patterns" unit, the "Explain" section includes a "Student Handout" that asks students to write numerical expressions based on position and value. This task supports Guidance 5.1c by requiring students to analyze number relationships and extend patterns, demonstrating their ability to transfer prior knowledge to novel situations.

In the Explore 1 section, students convert within the same measurement system using units of length, volume, and weight. In the "Elaborate" section, the Car Wash interactive activity prompts students to solve real-world problems involving unit conversions related to volume and capacity. These tasks guide students to apply conceptual understanding in practical, unfamiliar scenarios, reinforcing their problem-solving skills.

In the Explore sections of Scopes 4.4G and 4.5A, as well as Scopes 4.5C and 4.5D, ensure students use what they know in new problem-solving situations. For instance, in Explore 3, Problem Solve Using the Four Operations Level 3, students apply their understanding of operations and estimation to identify missing information and select appropriate tools. In Explore 2, Solve Problems with Area and Perimeter, questions require students to determine which formula to use and explain their reasoning.

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.

In Scope 4.4BDCGH under the Elaborate tab, the Fluency Builder game "Apuestas riesgosas" demonstrates active application of math concepts through a fast-paced, interactive format. Students engage in problem-solving by drawing and solving questions from envelopes, verifying their answers collaboratively. This task encourages conceptual application in new contexts while reinforcing grade-level content.

In Scope 4.4BDCGH under the Elaborate tab, the materials include tasks designed to build student automaticity and fluency essential for grade-level success. For example, the spiraled review activity integrates multiple models—such as grids, bar models, and charts—to strengthen students' procedural fluency. This task supports accurate and efficient problem-solving in real-world contexts involving multiplication, area, perimeter, and fraction comparison. These embedded models and tasks enable continuous fluency development without disrupting deeper content engagement.

The "Daily Numeracy" unit and "Fact Fluency" section promote repeated, purposeful practice that builds fluency and supports students in completing grade-level tasks efficiently. For example, the "Guess the Number" and "Solve It" activities develop automaticity through daily routines involving prime numbers, rounding, fractions, and basic operations. In the "Fact Fluency: Addition and Subtraction" and "Fact Fluency: Multiplication and Division" sections, students engage in strategy-based learning through hands-on activities, mini-lessons, and games.

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 grade 4 Engage activities at the beginning of each scope help students to practice the efficient and flexible application of mathematical procedures. The tools in the activities allow students to flexibly explore different strategies, make predictions, and explain their thinking before formal algorithms are introduced. For example, in the "Multiplication Models and Strategies" unit, students begin with manipulatives such as base-ten blocks and arrays to model multiplication.

The "Fluency Builder" provides students with repeated opportunities to practice efficient, flexible, and accurate mathematical procedures throughout each unit. The activities offer students structured opportunities to strengthen mathematical procedures through repetition and variation. For example, in the "Addition and Subtraction" unit, the "Fluency Builder" focuses on multi-digit subtraction with regrouping. Students complete timed sets and reflect on their strategies, promoting both accuracy and speed in computation.

The "Teacher Toolbox" and lesson components offer daily opportunities to apply mathematical procedures with efficiency and flexibility through pattern creation and extension, supporting number sense and reasoning. The "Daily Numeracy" component includes structured routines like counting collections, choral counting, and pattern recognition. Teachers use visual displays and discussion prompts to foster mental math strategies and numerical reasoning. For example, in multiplication, base ten models support instruction in scaling by tens and hundreds, aligning with expectations for the use of models and procedural fluency.

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.

The grade 4 materials provide opportunities for students to evaluate mathematical approaches through student journals and group activities. Instructional tasks prompt students to explain reasoning, model solutions, and write equations, supporting the development of critical thinking and problem-solving skills. Visual models and collaborative discussions guide students to reflect on the efficiency and accuracy of their methods across units.

Scope 4.4EFGH materials have embedded evaluation of solution-based strategies across lessons. The tasks promote strategy evaluation across varying contexts to strengthen flexibility in problem-solving. Students use "Area Model Cards" to solve division problems and assess their modeling decisions. In the "Number Patterns" unit, teacher-guided questions direct students to analyze relationships between numerical positions and values.

"Angles," "Multiplication Models," and the "Addition and Subtraction Algorithms" units offer targeted prompts to help students assess solution strategies and support the evaluation of mathematical processes across lessons and units. Instructional questions such as "¿Cuáles son las diferentes maneras en que representaste el problema?" and "¿Cómo se resuelve con el algoritmo estándar?" lead students to compare procedures for accuracy and effectiveness.

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

The grade 4 materials in Scope 4.5B provide embedded teacher support that promotes increasingly efficient problem-solving approaches. For example, the "Procedure and Facilitation Points" section includes step-by-step instructions, guiding questions aligned with depth of knowledge levels, and

structured opportunities for students to explore numerical relationships. These supports encourage reasoning with models and manipulatives, guiding students toward selecting and refining strategies through repeated reasoning.

Explore 4 materials offer embedded support designed to foster efficiency with structured support for students' transition from conceptual understanding to procedural fluency. In the "Number Patterns Division Models and Strategies" unit, students use partial quotients and the standard algorithm to solve division problems with multi-digit dividends. The "Partial Quotients Work Mat" and teacher-guided questions help monitor understanding and reinforce the subtraction of distributed amounts.

The "Compare Fractions" and "Number Patterns" units offer guiding questions that help students select appropriate operations and connect inverse relationships, supporting strategy development and efficiency in problem-solving. In the "Compare Fractions" unit, guiding questions prompt students to consider both whole numbers and fractional parts when comparing values. In the "Number Patterns" unit, the "Teacher Guide" and "Scope Summary" outline how students model real-world relationships to derive rules and solve problems.

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.

The grade 4 materials explicitly address both conceptual and procedural components of the TEKS, in the "Content Unwrapped" section of Scope 5.3BC. For example, the "Implications for Instruction" begins instruction with area models and partial quotients, explicitly showing conceptual learning to procedural fluency through the introduction of the standard algorithm.

The Explore activities tab of Scope 5.3BC, the "Teacher Guide" presents a structured progression from conceptual to procedural understanding. Explore 1 uses area models and manipulatives to teach multiplication and division concepts. Explore 2 applies these concepts through real-life scenarios and introduces standard algorithms.

The "Multiply Decimals" and "Multiply Fractions" units material develops both conceptual understanding and procedural fluency. For example, in the "Multiply Fractions" unit, area models and number lines connect conceptual understanding to multiplication expressions and procedural fluency. For example, the "Content Unwrapped" section in the "Teacher Guide" explains how students move from representing numbers using expanded form to understanding expanded notation. This section helps bridge conceptual knowledge of number composition with the procedural skills needed for comparing and composing numbers.

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 grade 4 materials provide structured opportunities for students to move from concrete to abstract representations. For example, in the "Place Value of Whole Numbers" unit, the "Content Unwrapped" and "Dissecting the Standard" sections include key conceptual vocabulary and progression. Students learn the value of digits through concrete, pictorial, and symbolic forms.

The "Implications for Instruction" explains how students build on prior knowledge of numbers up to one hundred thousand and extend this to one million, using concrete models and visuals to make these large numbers more accessible.

The "Area and Perimeter" unit states that students first use concrete objects to explore shapes before developing and applying formulas. The "How to Use STEMscopes Texas Math" video reinforces this approach, stating that students manipulate physical objects, then move to pictorial models, and finally use symbols.

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 grade 4 instructional materials explicitly support students as they make connections between concrete and representational models and abstract mathematical concepts. The Explore 4 section includes procedures and facilitation points where students use area models and tools like templates and dry-erase markers to visualize multiplication. For example, students use area model templates to visualize partial products. This activity supports their connection between concrete (area models) and abstract (multiplication algorithm) understanding.

Materials found in the Explore tab, "Add and Subtract Fractions and Mixed Numbers" unit, offer students guided opportunities to measure and draw angles with plastic protractors, label diagrams, and record numeric values to determine angle types. In the "Fractions" unit, students decompose fractions using pie-piece manipulatives, then draw and label models while linking them to equations. Teacher prompts such as "How are the slices of cake related?" prompt critical connections between models and numeric expressions.

The "Number Patterns and Properties of Two-Dimensional Figures" unit uses manipulatives, visual aids, and written representations to make connections from concrete to abstract thinking. For example, "Exit Tickets", "Anchor Charts," and "Interactive Notebooks" serve as tools to reinforce student understanding.

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 grade 4 materials provide structured opportunities for students to develop academic mathematical language through the use of visuals, manipulatives, and structured language development strategies. For example, in the "Place Value of Whole Numbers" unit, Explore 1, the "Math Chat" section incorporates "Structured Conversation" routines supported by "Depth of Knowledge" questions. These routines prompt students to articulate mathematical relationships and vocabulary, helping them connect numerals to expanded notation and understand digit value within place value systems.

The Explore activities in Scopes 4.2D and 4.4AG include manipulatives and visuals that strengthen vocabulary and conceptual understanding. Guiding questions embedded in each lesson promote mathematical discussions and encourage vocabulary use in both written and oral formats. For example, in Explore 3, students use "Boarding Passes" and place value disks to model multi-digit addition. In Explore 4, students apply subtraction strategies using scenario cards, a subtraction mat, and place value disks. These hands-on tools and familiar contexts help EB students connect new math content to everyday experiences. For example, modeling multi-digit addition using boarding passes not only builds mathematical understanding but also activates students' background knowledge related to travel and distance.

Language development support appears in multiple features throughout the materials. The "Teacher Toolbox" offers multilingual resources, including a visual glossary, visual manipulatives, and sentence stems, allowing students to link mathematical terms with visuals and student-friendly language. For example, the lesson includes a "Language Support" section that provides sentence frames like, "The event started at __ and ended at __, so the elapsed time is __," and teacher-guided questions to scaffold student responses. These supports promote vocabulary development (terms like *elapsed*, *start time*, *end time*), comprehension of the mathematical process, and opportunities for students to express their understanding through both oral discussion and written journal responses.

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

The grade 4 materials have embedded teacher support that scaffolds and extends academic mathematical vocabulary in context during student communication. For example, in the "Measurement" unit, the Explore lessons include sentence stems such as, "Te escuché decir ___" "Estoy de acuerdo porque ___," ("I heard you say ___" "I agree because ___") that help students use vocabulary precisely during structured peer discussions. The Language Support section provides targeted tools to guide vocabulary use while reinforcing key math concepts.

The "Explain" section of the "Measurement" unit features an Anchor Chart activity where students contribute vocabulary under teacher guidance. Guiding questions such as "¿Qué operación utilizas para convertir unidades de medida más pequeñas en unidades de medida más grandes?" encourage students to apply academic language while reasoning about measurement. These embedded supports extend students' use of academic language into spoken and written communication.

The "Compare and Order Numbers" unit includes "Picture Vocabulary" flash cards and student-created visuals to link terminology to prior knowledge and extend students' use of academic mathematical vocabulary. Teachers facilitate vocabulary-building discussions and guide clarification of unfamiliar words. These structured vocabulary tasks give students repeated opportunities to communicate math concepts using academic language.

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.

The grade 4 materials provide embedded teacher guidance that supports the use and development of precise mathematical language through vocabulary, syntax, and discourse. For example, the Student Journal, Math Chat, and Procedure and Facilitation Points guide teachers in supporting structured mathematical conversations where students practice using accurate mathematical vocabulary and sentence structures. In the Teacher Toolbox the "Communicate Math" section outlines clear expectations for incorporating academic language into discussions, ensuring every student contributes organized ideas using correct mathematical terms.

In Scopes 4.2D and 4.4AG, the materials provide specific instructional tools that reinforce mathematical language development across various units. For example, in Explain, the "My Math Thoughts" activity prompts students to express their thinking in peer discussions using appropriate academic language, strengthening their understanding over time. In Scopes 4.5C and 4.5D, the teacher-guided prompts and

reflection tasks in the Explore 1 activities help students explain mathematical relationships, using appropriate academic vocabulary in syntax. In the "Profit, Budgets, and Banking" unit, students distinguish between fixed and variable expenses, calculate profit, and discuss savings options. The lesson includes teacher guidance to explicitly introduce terms such as income, invest, and expenses. Students generate a visual glossary of new terms and participate in discussions where teachers explain unknown vocabulary to ensure clarity.

The "Angles" unit provides example responses to support student discourse and teacher guidance. Teacher questions are paired with exemplary student responses, helping guide classroom conversations toward accurate mathematical reasoning. In the "Launch" unit, vocabulary strategies such as Speak Up actively engage students in using terms in context through games and partner interactions, reinforcing connections between concepts and language. This consistent support across units allows students to build and refine a robust math language toolkit over time.

5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	All criteria for guidance met.	2/2
5.5c	All criteria for guidance met.	2/2
5.5d	All criteria for guidance met.	1/1
—	**TOTAL**	6/6

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

The grade 4 instructional materials integrate the TEKS process standards consistently and meaningfully across multiple units and instructional components. These standards are embedded in ways that promote problem-solving, reasoning, mathematical communication, and real-world application. In both Explore 1 and Explore 2, students engage in real-world scenarios that deepen their understanding of place value. For example, in Explore 1, the lesson simulates analyzing lottery checks, requiring students to evaluate different number forms and make connections to real-world financial literacy. In Explore 2, students participate in a treasure hunt activity that incorporates place value, multiplication, and division, encouraging them to apply multiple concepts to a practical context.

The "Area and Perimeter" unit embeds process standards by guiding students to derive formulas through hands-on modeling. In the "Content Unwrapped" section, students explore multiple strategies to understand perimeter and area, rather than receiving direct instruction. This structure supports discovery-based learning and reinforces reasoning and problem-solving skills.

In the "Number Patterns" unit, materials provide students with "Circuit Cards" and reflective Student Journal prompts that require them to identify patterns, justify strategies, and select appropriate methods. For example, one journal prompt asks students, "¿Cuál es la regla para determinar la salida cuando se da la entrada? Explica." ("What is the rule for determining the output when given input? Explain."), which supports the TEKS process standard by communicating mathematical ideas and reasoning.

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

The grade 4 Explore materials incorporate and connect the TEKS process standards throughout the course. The "Relate Decimals to Fractions" lesson in Explore 1 has students use models to represent fractional values and express them in fraction notation, decimal notation, and word form. The "Represent Tenths and Hundredths with Expanded Notation" lesson in Explore 2 has students use visual and numerical strategies to deepen understanding. These lessons demonstrate intentional alignment of process standards with content to support conceptual transfer across mathematical topics.

The Teacher Toolbox includes a dedicated "Process Standards" tab that provides explicit descriptions of each standard's instructional purpose. For example, the section "Communicate Mathematical Ideas and Their Implications" explains that effective communication strengthens conceptual understanding through writing, discussion, and reasoning. For example, the instructional notes guide teachers in embedding process standards consistently across lessons and promote student engagement in reflective, collaborative learning.

Each unit begins with an overview that outlines the focal content standards alongside the relevant TEKS process standards. For example, the "Essentials—Content Unwrapped" section explicitly details how students will engage with process standards such as problem-solving, communicating mathematical ideas, using representations, and applying strategies across multiple problem types. These overviews establish a coherent framework for how process standards connect to each unit's conceptual goals.

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

The grade 4 materials provide clear evidence of how the TEKS process standards are embedded and interconnected throughout each unit. For example, the "Content Support" sections give teachers explicit background knowledge and instructional guidance to implement higher-order mathematical tasks that promote problem-solving. This support enhances instruction by helping teachers understand how students engage and apply the standards during lessons.

Each unit includes detailed explanations that align process standards with instructional content. For example, in the "Teacher Toolbox" under "Display, Explain, and Justify Mathematical Ideas," the materials explain the standard's intent and offer strategies and examples for guiding students to express and justify mathematical thinking. Similarly, in Scope 4.2AB and the "Place Value of Whole Numbers" unit, the materials highlight how students interpret, represent, and apply mathematical concepts using real-life scenarios, ensuring alignment with standards 4.2A and 4.2B.

The "Area and Perimeter" unit demonstrates how process standards such as 4.1E connect learning with real-world problems through models and visual representations. In sections like "What Might That Look Like," materials offer specific, grade-level examples where students explore mathematical relationships through analysis, discussion, and representation. These elements confirm that the materials provide a consistent, unit-level description of how TEKS process standards are integrated and support student learning.

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

Grade 4 materials provide a clear overview of the TEKS Mathematical Process Standards within each lesson. Each Explore lesson explicitly lists the process standards addressed, ensuring alignment and transparency. For instance, in Scope 4.2AB—Explore 1 and Scope 4.2C—Explore 1, the lesson

descriptions include a dedicated section that identifies the Mathematical Process Standards and explains how they are applied during instruction.

Additional evidence is found in the "Represent and Interpret Data" unit, where the "Scopes Overview Materials "detail the integration of process standards such as 4.1A. This standard encourages students to use data representations like dot plots and stem-and-leaf plots to solve real-world problems. The "Teacher Toolbox" further supports this integration by outlining the standards by unit and guiding teachers in their implementation through the "Putting Standards into Action" resource.

Student materials also reinforce the standards through direct application. In the "Area and Perimeter" unit, students demonstrate understanding by drawing models and writing equations in the Student Journal. In the "Compare Fractions" unit, the "Would You Rather" cards present everyday scenarios that require students to apply mathematical reasoning. These examples confirm that the TEKS process standards are embedded into both instruction and student practice across lessons.

6. Productive Struggle

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

6.1 Student Self-Efficacy

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.1a	All criteria for guidance met.	3/3
6.1b	All criteria for guidance met.	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.

The grade 4 materials provide opportunities for students to think mathematically, persevere through problem solving, and make sense of mathematics by offering explicit support for engagement in mathematical reasoning. The "Procedure and Facilitation" sections offer structured opportunities for students to reflect on mathematical strategies and build deeper comprehension. For example, in Scope 4.4A, Explore 1, students model quantities like 4.25 and 3.5 using place value disks, apply the partial sums method and standard algorithm, and use "Math Chat" prompts to explain their reasoning. These tasks promote active thinking and strengthen long-term understanding.

Each Explore guides students to represent addition equations using grid models. Students break numbers into partial sums and record their reasoning step-by-step, promoting clarity in their thought processes, providing concrete and visual models that deepen mathematical sense-making. In the "Add and Subtract Decimals" unit in Explore 1, the Student Journal includes a game where students practice decimal operations using multiple strategies and respond to reflective questions such as, "¿Cómo usaste los modelos de cuadrícula para sumar tus decimales?" ("How did you use the grid models to add your decimals?"). These structured tasks reinforce perseverance and meaningful engagement with math content.

In the "Explore the Profit, Budget, and Banking" unit, students analyze fixed and variable expenses, calculate profit, and evaluate savings options in realistic contexts, which embed real-world financial literacy tasks to support deeper reasoning. For example, guiding questions encourage students to connect mathematical decisions to practical scenarios: "¿Qué crees que Maravillas Mordisco debe hacer con sus ganancias?" ("What do you think Maravillas Mordisco should do with its profits?"). Similarly, in the Small Group Intervention sections, students collaborate using base ten blocks and work mats to solve problems involving decimals, reinforcing their conceptual understanding, demonstrating mathematical thinking and persistence.

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

The grade 4 materials support students in understanding, explaining, and justifying multiple ways to represent and solve mathematical problems. The Explore lessons promote critical thinking and build conceptual understanding through varied representations. For example, the "Problem Solve Using the Four Operations" unit provides scenario cards where students represent problems with whole numbers using paper strips, diagrams, and equations. Students record multiple strategies in the Student Journal and answer reflection questions such as, "¿Cuáles fueron las formas diferentes que utilizaste para representar el problema?" ("What were the different ways you used to represent the problem?").

The Foundation Builder offers teachers guidance to create learning environments that support exploration of strategies and mathematical discussion. The Explore activities show how students determine and explain multiple solution paths using models and context clues. For example, in Explore 1, students use tools like paper strips to represent values and solve for unknowns using different operations. In Explore 2, students select operations based on the context of donut shop problems and justify their thinking with visuals and group dialogue.

In the "Problem Solve Using the Four Operations" unit, "Problem-Based Task: Party Time," students explore real-world problems using a variety of methods. The materials provide opportunities for students to demonstrate multiple strategies that occur in collaborative, real-world challenges to apply fraction comparison skills to an open-ended scenario. For example, in the "Choice Board" activity, students collect data, create a frequency table, draw a bar graph, and write a multistep problem to share and solve with a peer, allowing students to explore, justify, and communicate diverse mathematical 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 grade 4 materials provide multiple opportunities for students to make sense of mathematics by doing, writing about, and discussing mathematical concepts. For example, in Scope 4.6BCD, in Explore 2, students sort and classify triangles, explain their reasoning to classmates, and use visual tools such as drawings and note cards. Additionally, students write in journals and respond to teacher-guided questions, promoting reflection and mathematical discourse. In Explore 3, students work collaboratively to classify shapes using clues, participate in group discussions, and explain classification decisions, further deepening understanding through interaction.

The Explore 4 activities in the "Measurement" unit require students to solve problems involving time intervals. Students convert and regroup time units to find equivalent measures, draw diagrams to model their thinking, and complete data tables with missing values, requiring students to solve, write, and explain mathematical reasoning. In the "Explain" section of the "Addition and Subtraction Algorithms"

unit, the "Show What You Know—Part 4: Multi-Digit Subtraction" task prompts students to write expressions, estimate solutions, perform standard algorithm computations, and construct solution statements, reinforcing multiple opportunities for mathematical communication.

In the "Add and Subtract Decimals" unit, in the Explore 1 lesson, students use a game in the Student Journal to represent and solve decimal problems with peers. Reflection questions support written and verbal explanation, such as "¿Cómo usaste los modelos de cuadrícula para sumar tus decimales?" ("How did you use grid models to add your decimals?"). In the "Intervention" section, the Small Group Intervention lesson guides students through the use of base ten blocks and work mats, with partners solving problems and responding to questions like, "¿Cómo podemos reagrupar con sumas parciales?" ("How can we regroup with partial sums?"). Students apply these strategies independently in the Checkup through purposeful opportunities for students to engage in doing, writing, and discussing mathematics.

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 grade 4 materials provide structured teacher support for guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications. In Scope 4.3ABEF in the Explore 1 activity, the teacher is prompted to ask questions at each stage of the lesson that require students to explain their reasoning and justify how they composed or decomposed fractions using visual models. The Explore 2 activity includes group activities where students use fraction tiles, discuss their strategies, and respond to teacher questions that prompt justification of their answers and comparison of methods.

The Explore section in the "Addition and Subtraction Algorithms" unit provides teacher guidance to encourage students to explain the steps in their problem-solving processes and respond to reflective questions. In the "Place Value of Whole Numbers" unit, teacher prompts assist students in interpreting numbers in various forms and articulating their reasoning when converting between word form, expanded form, and numerals. These embedded questions guide students to reflect on the logic of their mathematical decisions and strengthen the communication of their mathematical thinking.

The "Compare Fractions" unit supports student reflection through scaffolded teacher guidance by helping teachers guide student reflection and justification. The "Teacher Toolbox" includes Structured Conversations and sentence stems from "Structures for Intentional Discourse (Spanish)," such as the "Pair, Square, Share" routine, which supports discussion and exploration of diverse problem-solving methods. For example, one prompt states, "Después de que los estudiantes hayan representado y registrado sus modelos, anímelos a trabajar juntos para analizar qué tienen de similar y diferente sus modelos y escribir sus respuestas en el documento 'Diario del estudiante'." ("After students have represented and recorded their models, encourage them to work together to analyze what is similar and different about their models and record their responses in the Student Journal."). Reflection questions reinforce justification through contextual reasoning: "¿Qué fracción representa la cantidad de pastel de galletas que quería el cliente?" ("What fraction represents the amount of cookie cake the customer wanted?").

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

The grade 4 materials provide teachers with targeted support to deliver explanatory feedback by identifying student misconceptions and offering instructional strategies to address them. In Scope 4.3ABEF, the Content Support "Misconceptions and Obstacles" materials describe common student errors, such as confusing numerators and denominators, and provide actionable suggestions for teachers to correct these misunderstandings. The "Foundation Builder" section reinforces this by offering possible preconceptions along with sample teacher questions designed to clarify student thinking.

The "Compare and Order Numbers" scope includes a "Progression of Learning" tool that sequences essential content while embedding opportunities for feedback through suggested core and supplemental activities. These tools allow teachers to assess understanding, address errors, and build conceptual clarity. Across all units, the feedback structures provide support by equipping teachers with clear, proactive strategies to address both individual and widespread misconceptions through meaningful, explanatory responses.

In the "Place Value of Whole Numbers" unit, the "Content Support" section outlines errors students may make when ordering place value periods and offers strategies such as using a segmented place value chart to support mastery. For example, the "Scaffolded Instruction Guide" directs teachers to the next steps based on assessment data, ensuring feedback is specific, targeted, and aligned to students' learning needs. Additionally, the Teacher’s Guide provides anticipated student responses alongside facilitation tips, helping educators respond to misconceptions in real time during lessons.