Accelerate Learning Inc.

Spanish Mathematics, 3

STEMscopes Texas Math–Grade 3 Spanish

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Full-Subject, Tier-1	**9798893533729**	**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	107	Flags Not in Report	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)	0	0	0

SUITABILITY EXCELLENCE FLAGS BY CATEGORY	IMRA REVIEWERS
Category 2: Alignment with Public Education's Constitutional Goal	1
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 are met.	3/3
1.1b	All criteria for guidance are met.	2/2
1.1c	All criteria for guidance are met.	2/2
1.1d	All criteria for guidance are 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 "Teacher Toolbox" includes a "Scope and Sequence" that outlines the specific order of math Texas Essential Knowledge and Skills (TEKS) and concepts taught throughout the school year. It begins with the "Launch into Grade 3 Scope," which explores the habits of a mathematician as students engage in a variety of skills: using clues about ordinal numbers to problem solve; solving addition problems by using place value; using clues such as even/odd, greater than/less than, and clues on a hundreds chart to reveal a mystery number; representing numbers with words, numerals, place value, and base ten blocks; comparing numbers by using place value and the symbols; and solving array problems by matching a story problem to the correct addition equation.

The "Scope and Sequence" includes the scope or unit name along with the TEKS covered under each. A total number of instructional days is suggested for each scope or unit. For example, the "Multiplication Strategies and Algorithms Scope" covers TEKS 3.4G and 3.4K. A total of ten instructional days is suggested for the effective implementation.

Concepts taught are identified in each scope or unit name. The "Explore" activity name provides a specific concept to be taught. For example, the "Multiplication Strategies and Algorithms Scope" has a total of four "Explore" activities entitled "Commutative and Associative Properties," "Arrays," "Area Models and the Distributive Property," and "Algorithms."

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 "Teacher Toolbox" includes a "Scope and Sequence" that has a suggested sequence for all scopes in the course. The provided "Scope and Sequence" documents are based on a 180-day instructional calendar.

The "Implementation Guide" section of the "Teacher Toolbox" includes a section on various instructional calendar options. It provides suggestions on ways to modify pacing to accommodate an alternate instructional calendar with 165 instructional days. For example, a suggestion to accommodate a shorter calendar includes using "Exit Tickets" and "Show What You Know" as homework for each "Explore" activity completed instead of in-class assignments.

The "Implementation Guide" also includes suggestions to modify pacing for an instructional calendar in which the number of days would be greater than 180. For example, a suggestion to accommodate a longer calendar includes using the "Project-Based Tasks" and "Fluency Builders" as collaborative extension activities.

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 "Course Rationale" also provides an explanation for how concepts to be learned in each scope connect to the overarching four focus areas in grade 3: "(1) understanding and applying place value concepts and properties of operations; (2) adding, subtracting, multiplying, and dividing whole numbers; (3) representing fractions as numbers; and (4) applying geometric reasoning, including the attributes of quadrilaterals."

The "Course Rationale" includes an explanation for the progression of scopes throughout the year. An explanation is provided of how each scope builds on previous knowledge.

The "Time Scope" focuses on solving problems involving intervals of time, which further assists students' application of numerical and problem-solving skills. Students make connections between their previous work with addition and subtraction using number lines and representing and solving problems that involve the addition and subtraction of time intervals.

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

The "Addition and Subtraction Strategies Scope" includes a "Teacher Guide" with defined protocols for teaching the scope, student expectations, background content knowledge, academic vocabulary, and vertical alignment.

The "Addition and Subtraction Strategies Scope" also includes a "Suggested Scope Calendar," which provides a protocol that teachers can follow when conducting lesson internalization.

The "Addition and Subtraction Strategies Scope" also includes a "Content Support" which can be used for conducting unit internalization. It provides an overview of the scope, including background knowledge that students must have to be successful. Possible student misconceptions and obstacles are also provided, along with important terms to know.

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

The "Implementation Guide" provides a one-pager with a brief explanation to support instructional leaders on the effective use of the resources provided by *STEMscopes Math Spanish*. Guidance on the effective use of the "Scope and Sequence," "Suggested Scope Calendars," and "Planning Guides" is provided.

"Planning Guides" are provided for each grade level in the "Essentials" section of the "Teacher Toolbox." The guides detail both whole-group and small-group options and give examples based on the varying number of "Explore" activities in each scope.

The "Implementation Guide" includes "Foundational Teacher Actions" to support instructional leaders when observing and providing targeted feedback. "Foundational Teacher Actions" include authentic, real-world phenomena in a context that is engaging and relevant to students. Opportunities for inquiry help students ask questions and explore ways to answer them. The "Foundational Teacher Actions" assist instructional leaders in ensuring high-quality implementation in every classroom.

1.2 Unit-Level Design

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

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

The materials include a "Teacher Guide" with each scope that provides the background knowledge needed to effectively engage with the scope.

Each scope contains a content support with terms to know. The terms to know represent vocabulary that will be necessary to effectively teach and learn the concepts.

Additionally, under the foundation builder, the words for the unit are provided with the possible misconception and the intent of what the student is to know about the word.

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

The materials include a "Take Home Letter" in both English and Spanish. It provides a breakdown of concepts that are being covered. Activities are provided in both English and Spanish that reinforce in-class learning.

The "Take Home Letter" provides the parent the opportunity to work the skills at home with the students. It includes an activity sheet in English and Spanish that is to be turned back into the teacher once it is completed.

The "Take Home Letter" also includes example problems with solutions.

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).

The materials include a "Suggested Scope Calendar" that provides a structured lesson plan with daily objectives. The structured format includes questions that check for understanding and promote the use of language.

The lesson plans include a list of materials necessary to support learning. Options for assessment are also provided at the end of each lesson, with a hyperlink to the assessment.

The materials also include a "Teacher Guide" for each scope. The "Teacher Guide" provides the same components found in the "Suggested Scope Calendar" but in a print-friendly format.

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

The materials include a "Teacher Guide" that contains a lesson overview with the materials needed to complete each lesson component.

The "Suggested Scope Calendar" on the home page for each scope gives the suggested time for each of the components of the lesson.

The student materials needed are also provided in the lesson overview. Examples of student materials include manipulatives and student journal activities.

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

The "Suggested Scope Calendar" has a practice section that contains guidance on which materials are more appropriate for extended practice based on performance level. Activities are listed for approaches, meets, and masters performance levels.

Small group intervention practice and guidance with materials are provided for each lesson overview on the home page of the unit, as well as in the "Teacher Guide." The guide contains guidance on extended practice for each level of students.

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 "Scopes Home" includes benchmark assessments that can be diagnostic or summative and administered at the beginning, middle, and end of the course. Alternate pre- and post-assessments focus on growth.

Scopes include an "Accessing Prior Knowledge" diagnostic assessment to support instructional planning. Lessons have "Exit Tickets" to support formative assessment of the learning.

The "Implementation Guide" includes other assessments that provide a variety of tasks and questions; examples of these include "Decide and Defend," "Technology Enhanced Questions," and "Show What You Know."

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

The "Teacher Toolbox" includes the "Implementation Guide," which provides a definition and intended purpose for each of the instructional assessments available. Diagnostic, formative, and summative types are included along with lesson- and unit-based assessments.

The "Addition and Subtraction Strategies Scope" includes a "Suggested Scope Calendar" with a section defining the assessments available. The intended purpose is also included for each of the assessments listed in the "Suggested Scope Calendar."

The "Count Money Scope" includes a "Suggested Scope Calendar" with a section defining the assessments available. The intended purpose is also included for each of the assessments listed in the "Suggested Scope Calendar."

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

The "Skills Quiz" includes "Tips and Tricks," which provides teacher guidance on how to administer the assessment. Different options are presented along with the materials and preparation needed for consistent and accurate administration.

The "Teacher Toolbox" provides "Pacing Guides" that break down the daily instruction into the different parts of the lesson. Guidance is provided on what assessments to use during whole-group or small-group instruction.

The "Teacher Toolbox" includes "Structured Conversations," where students engage in discourse about a provided question or prompt using routines to facilitate structured conversations. Guidance is provided on how to administer these formative assessments.

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

The "Teacher Toolbox" provides a "Scope and Sequence" that lists all the TEKS covered in the pre-, mid-, and post-benchmark assessments along with each scope of the course. There is alignment between the TEKS being assessed in the benchmarks with the TEKS being taught in the scopes.

The "Teacher Guide" in each scope provides "Engage" and "Evaluate" assessments that directly align with the objectives of the unit and lessons provided within the unit. The "Engage" assessments lend themselves towards a diagnostic purpose while the evaluate assessments can be used either as formative or summative.

STEMscopes Math Spanish provides a pre- and post-benchmark assessment to measure growth. A list of all TEKS and objectives covered is provided and it aligns with the course.

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

STEMscopes Math Spanish includes scopes containing an "Evaluate" section that provides "Technology Enhanced Questions." There are six different question types ranging from multiple choice to adjusting graphs accurately.

The "Evaluate" section of each scope provides other types of assessments such as "Show and Tell" and an "Observation Checklist." In these assessments, students are prompted to complete a task while the teacher uses a rubric to assess.

The "Skills Quiz" is another type of assessment located in the "Evaluate" section of each scope. This assessment can be assigned digitally or administered on paper. It provides question items in multiple-choice, fill-in-the-blank, and open-response type items.

2.2 Data Analysis and Progress Monitoring

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

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

The "Area Scope" provides an "Interview Rubric" in the "Show and Tell" assessment activity to provide guidance in interpreting student performance. The "Interview Rubric" also suggests interventions based on the student's performance on the tasks.

The "Perimeter Scope" includes a "Heat Map" that students can complete to perform an item analysis. Assessment questions are grouped by standard, and students color each question to mark as correct or incorrect. This allows teachers and students to reflect on levels of understanding for each standard.

Each scope includes a "Scaffolded Instructional Guide" that gives specific instructions on the interpretation of assessments. The "Scaffolded Instruction Guide" suggests how to divide the students into groups based on their results, and the activities to be used for each group.

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

STEMscopes Math Spanish provides a "Scaffolded Instructional Guide" in each scope that guides using assessment data to respond to student trends in performance. Based on a student's percentile range, a variety of tasks and activities is suggested to best respond to student performance on assessments.

STEMscopes Math Spanish provides a "Suggested Scope Calendar" in each scope that guides teachers on adjusting lessons based on how students perform on assessments. It provides guidance on adjustments to pacing, along with specific activities to support or challenge. For example, if most students struggle on a quiz about place value, the calendar tells the teacher to spend extra time on small-group intervention before moving on. If students do well, it suggests moving to enrichment games or advanced practice.

STEMscopes Math Spanish provides a "Differentiation Pathway" in each scope that provides teachers specific guidance to target various performance levels. It suggests which activities and tasks should be reserved for use with students who are at the masters, meets, and approaches levels of performance.

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

STEMscopes Math Spanish provides a "Heat Map" in each scope that functions as a progress-monitoring tool for both teachers and students. It tracks student performance over time, enabling grouping and intervention based on performance trends. The color-coded tool for tracking student mastery by question and standard allows teachers to adjust instruction, and students to reflect on their learning.

STEMscopes Math Spanish provides "My Math Thoughts," which include reflection pages where students record observations of their learning. This allows them to become active participants in assessing their progress.

STEMscopes Math Spanish includes a "Teacher Observation Checklist," where teachers can identify how the skill or concept was observed, and notes for feedback to provide the student. Guidance for further instruction is also provided.

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.

STEMscopes Math Spanish provides an "Intervention" tab in every scope that includes small-group intervention and scaffolded activities for students who have not mastered grade-level skills. The "Intervention" tab also provides supplemental aids, along with teacher guidance for modeling, demonstrating, and allowing for student practice using the supplemental aids. For example, the "Addition and Subtraction Strategies Scope" includes base tens as a supplemental aid that students use for a variety of applications, such as to practice numeracy, operations, place value, and fractions.

STEMscopes Math Spanish provides an "Instructional Support" section in each "Explore" activity that provides targeted strategies teachers can use to help struggling learners during the hands-on exploration. These supports are skill-specific and contextualized within the current lesson. For example, the "Explore 1" activity in the "Multiplication Models Scope" includes the following guidance: "At the beginning of the 'Explore,' when displaying and discussing equal groups of counters, provide an alternative method to record the auditory information and offer a visual representation of the idea, such as an anchor chart. As equal groups of counters are being discussed, record student discussions of what they notice about the model and the symbol that represents the operation and what it means, and relate the phrase groups of to each model."

STEMscopes Math Spanish includes a *Scaffolded Instruction Guide* in every scope that includes activities for students who have not yet reached proficiency. Instructional activities are differentiated depending on whether a student can perform on grade level with support, or if the student needs previous grade-level remediation.

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)

STEMscopes Math Spanish includes a "Content Support" section in each scope that lists "Terms to Know," along with their definitions. The "Content Support" also provides an explanation of important terms/concepts that teachers should have a clear understanding of prior to teaching. For example, in the "Area Scope," an explanation of the following terms is provided to teachers: "Finding the Area of Rectangles," "Decompose Congruent Figures," and "Area Models and Composite Figures."

STEMscopes Math Spanish includes "Picture Vocabulary" in each scope that can be used as a pre-teaching or embedded support for unfamiliar vocabulary and concepts. For example, the "Area Scope" includes "Picture Vocabulary" cards for the terms *additive property of area, area, array, compose, composite figure, congruent, decompose, equation, length, multiply, rectangle, square unit, tiling,* and *width*. A student-friendly definition is included on each "Picture Vocabulary" card.

The "Launch Scope" includes various vocabulary strategies that support unfamiliar words and concepts. Students engage in vocabulary strategies as games that help make connections between important words and concepts. For example, in the vocabulary strategy "Bingo!" students engage in a vocabulary game using strategies to make connections among important words and concepts. Students play bingo to practice vocabulary terms.

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.

STEMscopes Math Spanish includes a *Scaffolded Instruction Guide* for every scope that provides activities for students who have demonstrated proficiency. The instructional activities are differentiated for students who are on grade level and for students who are above grade level. For example, the "Perimeter Scope" includes "Raptor Park" as an interactive activity for students on grade level. Students above grade level can engage in a "Problem Based Task" and "Life Connections" activities.

STEMscopes Math Spanish includes an "Instructional Supports" section for every "Explore" lesson that provides teachers with guidance for differentiating instruction to students who have demonstrated proficiency in the grade-level content. The "Instructional Supports" provides a task or activity for students in need of a challenge. The "Explore 1" activity of the "Perimeter Scope" provides the following guidance: "As an extension, challenge students to create a song, poem, or presentation about efficient strategies for finding the perimeter of a figure."

STEMscopes Math Spanish includes an "Acceleration" tab that includes guidance for various extension and enrichment activities. For example, the "Math Today" activity helps students explore connections and applications of math and other cross-curricular content. In the "Perimeter Scope," the "Math Today" activity has students explore the connection between perimeter and aquaponic farming.

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.

"Explore" activities include an "Instructional Support" section that provides guidance to teachers in modeling and explaining the concept to be learned. The "Explore 1" activity of the "Addition and Subtraction Strategies Scope" provides guidance to teachers in modeling and explaining the concept to be learned. For example, the second bullet states, "If students need additional support with knowing which number the target number is closer to, place additional tick marks between the numbers. Have students count the tick marks to see which multiple is closer."

The "Procedures and Facilitation Points" section found within each "Explore" activity provides detailed prompts and guidance through the process of modeling and explaining mathematical concepts. This section provides clear, step-by-step directions that align with the learning objective and engage students in hands-on exploration while connecting learning to conceptual understanding. For example, the "Explore 1" activity in the Equivalent Fractions Scope includes the following prompts and guidance: "Give one bin to each group. Ask students to observe the Ingredient Card they have in their bin. Students should choose a set of manipulatives and build the fractional part described on the card. Students then use the remaining fraction circles or tiles to find as many different ways as possible to represent the same amount of that ingredient. Students should record the equivalent fractions they find in their student journals."

Each scope also includes a "Small-Group Intervention" section that provides explicit and direct prompts and guidance to support the teacher in modeling and explaining the concepts. The "Procedure and Facilitation Points" section provides detailed prompts and guidance through the process of reteaching a concept. This section provides clear, step-by-step directions that support the concept to be learned.

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

The "Teacher Guide" included in each scope provides teachers with a comprehensive outline for lesson delivery. It includes pacing suggestions, learning objectives, standards alignment, and guidance on how to navigate each phase of instruction ("Engage," "Explore," "Explain," "Elaborate," "Evaluate," "Intervention," and "Acceleration"). This helps teachers plan lessons using a variety of instructional

approaches such as inquiry-based learning, direct instruction, and guided practice while ensuring consistency and alignment to grade-level content.

The "Explore 1" activity in the "Division Models Scope" includes an exploration of concepts and opportunities for student discourse as instructional approaches: "Assign a Scenario Card to each group. Have groups take their paper plates and student journals with them to their Scenario Cards. Instruct them to read their scenario, use the plates and counting objects to make a model, and complete the portion of their Student Journals for that scenario." The "Explore 1" activity concludes with an "Exit Ticket."

The "Implementation Guide" includes the "Resources and Tools" section, which provides the resources and tools that will be used throughout the lesson delivery. Examples of these include language connections, virtual manipulatives, virtual learning videos, "My Math Thoughts or Math Story," "Problem-Based Task or Mathematical Modeling Task," and "Structured Conversation Routines." Each of the resources is defined and provided in the applicable scopes.

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.

Every scope includes a "Suggested Scope Calendar" with activities to be done as a warm-up, whole-group, or small-group. It also provides activities for guided and independent practice. The "Engage" activities introduce concepts and are set up to be implemented in a collaborative setting where students engage with either a small-group or with a partner.

The "Explore" activities in each scope are structured to support guided and collaborative practice. The "Procedure and Instructional Supports" sections provide clear, step-by-step teacher guidance for organizing instruction in whole-group, small-group, or partner settings. Students engage in hands-on exploration using manipulatives, visual models, and journals, promoting collaborative problem-solving and active engagement with mathematical concepts.

The "Teacher Guide" suggests instructional groupings for each lesson component. There are also practice mode recommendations, such as guided instruction during "Explain" activities, collaborative learning during "Explore" activities, and independent practice during "Elaborate" activities.

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 are met.	1/1
3.3c	All criteria for guidance are 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.

"Explore" activities include a "Language Support" section that provides implementation guidance to support teachers of bilingual and ESL programs. A list of the English Language Proficiency Standards (ELPS) is provided. The "Implementation Guidance" includes sentence stems and frames that the teacher can use during the lesson, such as, "The location of my beanbag on the number line is ___," from. Ideas to effectively use visual aids are also provided in the "Language Support" section of every "Explore" activity, such as this example from the "Explore 1–Estimation and Rounding" activity: "Provide students with the 'Discourse Sheet' to guide discussions about rounding. Place it in a sheet protector, or laminate it to create an erasable surface, allowing students to record verbal discussions in a written format. Students can read through their 'Discourse Sheets' after responses have been recorded, analyze the responses, and make any necessary revisions."

Each scope includes a "Language Connection" section that provides students with opportunities to use their linguistic and cultural background knowledge to make connections to new skills, vocabulary, and concepts. Implementation guidance is provided based on the students' level of English proficiency and by domain: listening, speaking, reading, and writing. For example, the "Language Connection" section of the

"Area Scope" provides the following prompts to address the "Advanced Writing" domain: "Look at the model. How can we find the total area of the figure? With your partners, find the total area of the figure. Discuss the steps you used to find the total area of the figure." Materials guide teachers to engage learners in speaking by asking students to read the prompt with their partners and practice answering verbally in complete sentences before writing their explanation in complete sentences.

The "Teacher Toolbox" includes a "Multilingual Learners Tab" that provides teacher guidance on effectively using the materials provided in *STEMscopes Math Spanish* to support a state-approved bilingual and ESL program. The "Multilingual Learners Tab" lists all the resources and tools provided in the materials that support students' language acquisition progression, such as: "Working on Words," "Sentence Stems/Frames," "Language Connections," and "Virtual Manipulatives."

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 "Picture Vocabulary" in every scope has students build academic vocabulary and connect vocabulary to their experiences. As students complete each "Explore" activity in the scope, the "Picture Vocabulary" slideshow is used to help students make connections to their experiences in the "Explore" activity. Students respond to the following questions: "How can you connect this word to your work in the Explore? How would you rephrase the definition in your own words? What do you picture in your mind when you hear this word?" For instance, after students complete the "Explore 1–Equal Groups and Repeated Addition" activity where they determine the total number of objects in a scenario using equal groups and repeated addition, they would be able to make connections to the following "Picture Vocabulary" cards: *array*, *equal groups*, *equation*, *expression*, *factor*, *model*, *multiple*, *multiplication*, *number line*, *product*, *repeated addition*, *skip counting*, and *strip diagram*.

The "Accessing Prior Knowledge" activity under the "Engage Tab" of each scope helps teachers activate emergent bilingual students' background knowledge using discussion prompts and familiar real-life contexts. For example, in the "Addition and Subtraction Problem Solving Scope," the teacher facilitates a class discussion around the scenario: "Tariq and Roberto have a total of 56 baseball cards. Of the cards, 32 are Tariq's. How many cards does Roberto have?" This supports comprehension, builds oral language, and prepares students for new academic vocabulary and content through culturally relevant connections. In the "Accessing Prior Knowledge" activity of the "Time Scope," students choose the correct times on analog and digital clocks and distinguish between a.m. and p.m. Academic vocabulary used in this activity includes *analog clock, digital clock, number line, solution,* and *time.*

"Explain Tabs" includes a "Language Connection" section that guides teachers to support emergent bilingual students through written discourse. Guidance is provided to teachers based on the level of proficiency: beginning, intermediate, and advanced. For the beginner writing domain in the "Time Scope,"

the teacher engages students through the following prompts: "Echo-read and discuss the words in the word bank. Define and provide examples as needed. 'Listen as I read the prompt. Follow along as you point to each word with your finger. Look at the model shown below. Explain what you notice. Look at the model. Think about what you know about using these models. We are going to explain what we notice by completing the sentences.' Echo-read the sentences, allowing students time to write the correct word from the word bank in the blank. Review the answers as a whole group."

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.

The "Explore" Activities, located in the "Compare and Order Numbers Scope," provide practice opportunities for students to develop and apply an understanding of place-value concepts. Students generate numbers greater than or less than up to 100,000 using objects, pictorial models, and place value. Students compare these numbers using language and symbols.

The "Evaluate" assessments, located in the "Compare and Order Numbers Scope," provide practice opportunities for students to demonstrate they can generate numbers greater than or less than up to 100,000. Students demonstrate that they can also compare numbers using spoken and written language.

The "Explain" activities, located in the "Compare and Order Numbers Scope," also provide opportunities for students to generate numbers greater than or less than 100,000, along with comparing those quantities. Students compare and order quantities using objects, pictorial models, and place value.

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

The "Explore" activities in the "Compare and Order Numbers" scope give students practice reading, writing, and representing numbers greater than or less than numbers up to 100,000. Students progress through using objects to pictorial models and place values to compare and order numbers.

The "Evaluate" assessments, located in the "Compare and Order Numbers Scope," provide practice opportunities for students to demonstrate they can read, write, and represent numbers greater than or less than numbers up to 100,000. The teacher provides prompts to students using a teacher prompt card and observes as they demonstrate their learning.

The "Explain" activities, located in the "Compare and Order Numbers Scope," provide practice generating numbers greater than or less than up to 100,000, along with comparing and ordering. The task progresses from more concrete tasks to more abstract tasks.

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.

STEMscopes Math Spanish provides a "Course Rationale" that demonstrates how each scope connects the course's focus areas. The focus areas are identified, and a chart clearly shows how connecting patterns, big ideas, and relationships are coherent across scopes.

The "Course Rationale" elaborates on how the suggested order of scopes supports coherence across units. It explains in detail how the concepts in each scope build from prior scopes and support the course's focus areas.

STEMscopes Math Spanish provides a "Teacher Guide" that demonstrates the coherence across units by connecting patterns, big ideas, and relationships between mathematical concepts. For instance, the lessons begin with assessing prior knowledge. As the lesson progresses, suggestions are provided for teachers to tie in concepts to previously taught lessons.

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.

STEMscopes Math Spanish includes a "Scope Overview" in each scope that demonstrates vertical alignment for content between the current grade level and past and future grade levels. It also reinforces academic language that repeats and evolves (e.g., from "grouping" to "place value" to "base-ten system").

STEMscopes Math Spanish includes a very detailed "Vertical Alignment K-3" chart for the strands of process skills, number and operations, algebraic reasoning, geometry and measurement, data analysis, and personal financial literacy. The correlation of the TEKS is provided from kindergarten to grade 3 and beyond. Teachers are able to see coherence between past, current, and future grade-level content.

STEMscopes Math Spanish includes a "Content Unwrapped" section that provides teachers with a detailed breakdown of the standards within a scope. Its main purpose is to help teachers understand exactly what students need to know and do, and how that content connects to instruction, assessment, and future learning. Important words to know are included.

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.

STEMscopes Math Spanish includes an "Engage" section at the Lesson level with "Accessing Prior Knowledge" activities. These activities include hands-on or visual tasks to help students recall prior experiences or math ideas. They are designed to activate what students already know and prepare their minds for new learning.

STEMscopes Math Spanish provides a "Teacher Guide" in the content support section of each scope that includes explicit guidance on how the current skill connects to prior learning. This helps teachers explain why a strategy or representation is used and how it builds on earlier concepts.

STEMscopes Math Spanish includes "Explore" sections at the Lesson level that connect prior knowledge of concepts and procedures to the current lesson. Activities in the "Math Chat" enable teachers to reinforce new mathematical knowledge and skills by connecting them to prior knowledge.

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.

STEMscopes Math Spanish includes "Spiraled Review" items in each scope that revisit prior TEKS and skills from earlier scopes and lessons; for example, in the "Place Value Scope," the "Spiraled Review" includes comparing numbers and basic addition facts learned earlier in the year.

STEMscopes Math Spanish includes "Small-Group Intervention" activities that are designed to reteach or reinforce concepts that students have not yet mastered. The students will revisit skills and concepts from prior scopes in the course.

STEMscopes Math Spanish includes "Show What You Know" activities that provide spaced retrieval opportunities with previously learned skills and concepts. In the tasks students are given, they use skills and concepts from prior lessons or units.

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

STEMscopes Math Spanish provides "Small-Group Intervention" and "Partner Discussions" activities as another opportunity to apply previously learned skills and concepts.

The *Teacher's Guide* provides prompts for teachers to engage students in conversations around previously learned problem-solving strategies. Additionally, the "Skills Assessment" incorporates concepts from previous lessons for students to solve.

"Fluency Builder" activities provide interleaved opportunities by mixing different types of problems and concepts. This requires students to switch between operations or strategies (e.g., addition, subtraction, place value), and make decisions about which method to use to solve math problems.

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 "Explore" activities found in every scope require students to engage with higher-order thinking skills. For example, under the "Procedure and Facilitation Points" for each of the "Explore" activities, the teacher prompts questions that require the students to interpret, analyze, and evaluate models. Students use their journals and/or manipulatives to complete the tasks. For example, the "Explore 1" activity in the "Addition and Subtraction Problem-Solving Scope" includes the following tasks: "In their student journals, students should do the following: Draw their diagrams. Write the equations that could represent the problem using a question mark or box for the unknown. Estimate the solution to the problem. Solve the problem using a strategy of their choice. Write a solution statement."

The "Math Chat" section of the "Explore" activities also provides opportunities to interpret, analyze, and evaluate models and representations. Depth of Knowledge (DOK) questions ranging from levels 1–4 are presented. Levels 3 and 4 require students to think at the strategic and extended levels. For example, the "Explore 1" activity in the "Addition and Subtraction Problem-Solving Scope" includes the following Level 3 question: "How are diagrams helpful?"

In the "Explore 3" activity of the "Addition and Subtraction Problem-Solving Scope," students solve problems by creating representations, estimating solutions, and solving using strategies of their choice. The second DOK-3 question in the "Math Chat" section prompts students to analyze and evaluate the most efficient strategies used to solve the problems. "Explain why the different groups could model and solve the problems differently."

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

"Explore" activities require students to create a variety of models to represent mathematical situations. The "Multiplication Models and Strategies Scope" prompts students to construct models, arrays, area models, and base-ten blocks to represent multiplication contexts. Students also explain and answer questions related to the use of these models.

STEMscopes Math Spanish includes a "Foundation Builder" activity for every scope where students create models to represent mathematical situations. Students use manipulatives to model and solve problems presented during the teacher's slideshow. For example, in the "Multiplication Models Scope," students engage in the following task: "Show slide 2, and allow students some time to work with their partners to create the model with their counters and come up with an equation to find the total on their dry-erase boards. Circulate, and observe student work, checking for misconceptions and understanding."

Materials include a "Problem-Based Task" for every scope where the students create models in order to represent mathematical situations and tie them into a real-world challenge. Students are either to draw or use manipulatives to answer the questions presented.

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

"Problem-Based Tasks" present real-world scenarios such as budgeting or multi-step word problems where students apply learned concepts to new contexts. The tasks are open-ended and often collaborative, requiring creative thought, justification, and application. Students move from concrete experience through representational understanding to flexible application in new contexts.

In the "Math Stories" activity for each scope, students engage with narrative-based tasks that embed mathematical problems within realistic or imaginative storylines. These stories introduce new problem situations and contexts. Students extract relevant information, apply previously learned concepts, and justify their solutions through reasoning and modeling. For example, in the "Multiplication Models Scope," students read a story entitled "A Snowy Day" and answer questions such as: "Which array represents how many snowballs Genesis and her friends made?"

In the "Career Connections" section of each scope, students apply their conceptual understanding to new problem situations and context. The teacher is directed to use a real-life situation that covers the concept taught, and students build a connection from the concept to their own experiences. For example, in the "Multiplication Models Scope," students engage with a story about James Gosling and then answer the following questions: "What career does James Gosling do? Thinking about what he has accomplished, does it seem difficult or easy to use math in this way? Have you ever thought about math like this before? Why do you think this career is important for our everyday society? Is this a career you are interested in? Why or why not? How did James Gosling use his technology skills in multiplication models?"

5.2 Development of Fluency

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

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

The "Fluency Builder" activities in each scope foster students' automaticity and fluency with key math skills. These activities provide targeted, routine practice with foundational skills such as number patterns, mental math strategies, and basic fact recall. For example, the "Fluency Builder–Multiplication within 100–Models and Equations" activity has students playing a matching card game where they match the model with the correct equation. The first player flips over two cards to try to find a match. If the player matches two cards, the player keeps the matched set and goes again. If the player does not find a match, they place the turned cards facedown again, and it is the next player's turn. Players continue taking turns until all of the matches have been found, the player who collects more cards wins.

"Spiraled Review" activities reinforce students' automaticity and fluency by providing consistent, cumulative practice with previously taught skills across several scopes. Students build fluency by repeated engagement with prior knowledge. For example, the "Spiraled Review–Confident Camper" activity has students review previous or current grade-level content such as: "Strip Diagrams," "Estimating," "Problem Solving Strategies," and "Rounding Using Number Lines."

The "Daily Numeracy" portion of the lesson allows students to build their automaticity and fluency by participating in a whole-group lesson where they come up with strategies to solve numerical problems. The "Daily Numeracy–Blank Number Line" activity has students gather together and then they randomly receive a number card. Students should not have anything with them for this activity. According to the slide and the order of numbers, students are asked to come to the blank number line to place their numbers. As students place numbers on the blank number line, the class is asked whether they agree or disagree using provided prompts.

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 "Engage" activities at the beginning of each scope help students to practice the application of mathematical procedures and reinforce procedural fluency by prompting them to solve quick math

problems mentally, discuss their strategies, and reflect on efficiency and flexibility through teacher-guided discussions. For example, in the "Foundation Builder" activity of the "Division Models Scope," students show their understanding of division by concretely representing it with materials.

The "Fluency Builder" provides students with repeated opportunities to practice efficient, flexible, and accurate mathematical procedures throughout each unit. These activities support procedural fluency through structured partner games, mental math tasks, and strategy-based routines that encourage students to choose and apply various methods based on the context of the problem. For example, the "Fluency Builder–Multiplication within 100–Models and Equations" activity has students playing a matching card game where they match the model with the correct equation. The first player flips over two cards to try to find a match. If the player matches two cards, the player keeps the matched set and goes again. If the player does not find a match, they place the turned cards facedown again, and it is the next player's turn. Players continue taking turns until all of the matches have been found, the player who collects more cards wins.

The daily "Small Group Rotation" provides students the opportunity to practice the application of mathematical procedures within the lesson and/or throughout a unit. For instance, the teacher provides a variety of activities for students to move through as part of a small-group lesson. Students work either independently or with a partner to complete the task. The *Planning Guide* suggests students practice at stations with activities such as "Fact Fluency," "Interactive Practice," "Fluency Builder," "Life Connection," "Spiraled Review," and "Show What You Know.

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 "Show and Tell" section, as well as the "Problem-Based Task" section, provide students the opportunities to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson. For example, the students work to complete a task that is given to them by the teacher in order to demonstrate their understanding of the concept taught.

The "Decide and Defend" activities present students with a completed mathematical problem, sometimes correct and sometimes incorrect. Students are asked to determine whether the solution is accurate and to justify their reasoning. For example, in the "Multiplication and Division Problem Solving Scope," the "Decide and Defend" activity presents a word problem with a diagram and equation used to solve it. Students must evaluate whether the solution accurately solves the problem and provide reasoning behind their evaluation.

STEMscopes Math Spanish embeds Mathematical DOK questions across all kindergarten –grade 3 within its "Explore" activities. "Math Chats" offer frequent prompts that require students to evaluate their procedures, processes, and solutions for efficiency, flexibility, and accuracy. For example, the "Explore 3–Model and Solve One- and Two-Step Problems" activity includes the following DOK-3 question: "Why is it important to represent a problem before working to solve it?" This intentional progression of depth-level

questioning across early grades builds metacognitive skills, as students continually reflect on how and why strategies work, not just what the correct answer is.

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

The "Teacher Guide" embeds support for teachers to guide students toward increasingly efficient mathematical approaches. It includes step-by-step facilitation tips, questioning prompts, and modeling suggestions that help teachers scaffold student thinking progressively. The guide also addresses common misconceptions and offers troubleshooting strategies to redirect students from less efficient methods toward more effective ones. For example, in the "Division Models Scope," the "Accessing Prior Knowledge" activity provides the following facilitation tip: "If some eager students quickly state the solutions without building models, then reinforce the value of physical representations while students support their answers."

The "Procedure and Facilitation Points" in each scope offers detailed, step-by-step frameworks that enable teachers to lead students toward increasingly efficient mathematical procedures. Through clear instructional sequences, reflective prompts, and modeling opportunities, teachers facilitate student awareness and adoption of more efficient problem-solving strategies. For example, in the "Explore 1– Equal Groups and Shares" activity, the following embedded support is provided: "Assign a Scenario Card to each group. Have groups take their paper plates and student journals with them to their Scenario Cards. Instruct them to read their scenario, use the plates and counting objects to make a model, and complete the portion of their student journals for that scenario. When students are ready, have them rotate to a new Scenario Card and repeat the process. Monitor students, and check for understanding as needed."

The "Small Group Instruction" provides the teacher with embedded support to guide students toward increasingly efficient approaches. The teacher is given specific steps to follow to facilitate the small group instruction for students who did not show approaching skills in the concept. For example, in the "Division Models Scope," the following steps are provided: "Ask students to discuss all they know about using diagrams to solve problems. Allow students to share their knowledge and understanding with the group. Distribute the Division Scenarios for Part II and a bag of linking cubes to each pair of students. Distribute a dry-erase marker to each student. Read the following scenario as students follow along using Part II Division Scenario Card 1: Lorna’s goal is to ride her bike for 63 minutes each week. She wants to ride her bike the same number of minutes each day of the week. How many minutes would she need to ride her bike each day?"

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 "Content Unwrapped" in each scope includes an "Implications for Instruction" section that focuses on the why and how behind mathematical procedures. The "Implications for Instruction" begins with conceptual implications related to why that will lead into procedural implications connecting to the how. For example, in the "Area Scope," the "Implications for Learning" section begins with students determining the area by counting individual square units. This conceptual emphasis connects to procedural emphasis as students then use the length of sides and multiplication to determine the area of a rectangle.

The "Course Rationale" explicitly describes how instruction develops both conceptual understanding and procedural fluency aligned to the TEKS. It outlines how students build number sense through modeling, problem-solving, and strategy use, while also gaining fluency with operations and place value. This balanced approach ensures that teachers understand the purpose behind each standard and how to support student mastery through both conceptual and procedural learning.

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 "Explore" activities encourage the use of manipulatives, supporting students' progression from concrete to pictorial to abstract understanding. Lessons in the "Explore" activities include hands-on tasks that use tools like cubes, ten-frames, tiles, or real-world objects to build foundational concepts. These concrete experiences are followed by activities where students are encouraged to draw representations and ultimately express ideas using numbers and symbols. This consistent, scaffolded use of manipulatives ensures students develop deep conceptual understanding before applying procedures abstractly.

The "Explore 1" activity in the "Multiplication Models Scope" has students using concrete models and manipulatives to solve problems. Students determine the total number of objects in a scenario using equal groups and repeated addition. The lesson progresses as students show how "three groups of four" can be written as 3×4.

The "Explore 4" activity in the" Multiplication Models Scope" has students continuing the learning to more abstract representations. Students explore multiplicative comparisons and represent multiplication in a variety of ways, such as repeated addition, arrays, diagrams, and number lines.

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.

In the "Explain" activities, students engage in journal prompts that guide them to reflect on their use of manipulatives or drawings, describe their mathematical thinking using numbers, words, and models, and make meaningful connections between representational models and abstract numeric or symbolic expressions. This structured reflection helps students connect, create, define, and explain their understanding.

In the "Explore 1" activity of the "Fractions Scope," students connect concrete objects to representational models and numeric concepts. Students begin by using concrete objects to represent various scenarios provided on Scenario Cards. Next, students create drawings to represent the fraction mentioned on the Scenario Cards. The lesson concludes with a teacher-facilitated discussion where students explain their work and discuss the numeral/denominator parts of the fraction.

"Anchor Charts" are created in every scope through teacher facilitation and student input. They are created after each "Explore" activity and are designed to help students connect representational models to numeric and symbolic forms. For example, in the "Division Models Scope," there are four anchor chart activities—one for each of the four "Explore" activities. After the "Explore 1" activity, students create an anchor chart on equal groups and shares. The teacher facilitates the discussion with the following questions: "How many total star stickers did Brianna buy? In a division problem, what is this number called? How many people are sharing the stickers? In a division problem, what is this number called? How can we figure out how many stickers each person should receive?"

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 "Launch into Grade 3 Scope" includes language development strategies where students engage in a vocabulary game using strategies to make connections among important words and concepts. These games combine visual support with verbal repetition and peer interaction, allowing students to connect vocabulary to concepts through play and movement. For example, in the "Vocabulary Strategies—Four in a Row," one student flips over a card and provides either the definition or the word. The other student checks the answer key to ensure the answer is correct. If the student provides a correct answer, they place a colored counter in a square on the game board. If the student is incorrect, they do not place a colored counter on the game board.

The "Explore 1—Skip Count Coins" activity has students use a skip-counting strategy to determine the total value of a collection of like coins. First, students sort the coins in the bag by type (pennies together in one group, nickels in another group, etc.). Students then write how many coins there are in each group in their student journal. Students work together to find the total value of each group of like coins and write the values in their student journal. They add up the total of each type of coin to find the total value of all the coins in the bag. Finally, students write the total donation in their student journal. Academic vocabulary used in this lesson includes: *combined, represent, skip counting, strategy, total, and value.*

The "Picture Vocabulary" slides are provided in every scope along with a teacher-led discussion to support academic language development. For example, in the "Count Money Scope," the following words are provided: *cent symbol, coin, combined, decimal point, dime, dollar, dollar sign, money, nickel, penny, quarter, represent, skip counting, strategy, total,* and *value*. Each slide includes a visual and student-friendly definition to support language development.

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

STEMscopes Math Spanish includes materials with embedded teacher guidance to scaffold and support students' development and use of academic mathematical vocabulary with "Picture Vocabulary" in each scope. Teachers are provided with guidance and prompts such as "How can you connect this word to your work in the 'Explore?' How would you rephrase the definition in your own words? What do you

picture in your mind when you hear this word?" Students build academic vocabulary and make connections. Students can add their pictures or drawings to their interactive vocabulary journals. Teachers can create math word walls in the classroom with the student handout materials that are provided.

The "Accessing Prior Knowledge" activities for each scope provide teacher guidance to scaffold and support the students' development and use of academic mathematical vocabulary. For example, in the "Multiplication Models Scope," the teacher distributes the student handout, and students read the prompt and the four students' responses. The teacher then facilitates a class discussion about which number sentence is correct. Students are encouraged to support their answers.

The "Math Chat" section of the "Explore" activities for each scope provides teacher guidance to scaffold and support the students' development and use of academic mathematical vocabulary. For example, in the "Explore 1—Equal Groups and Repeated Addition" activity, students determine the total number of objects in a scenario using equal groups and repeated addition. The teacher facilitates a discussion using the following questions: "What are some ways we can model and solve a multiplication equation? How are the models and multiplication equations related?"

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 "Math Chat" section in each "Explore" activity supports students in developing and using appropriate mathematical language through structured discourse. Teachers are provided with sample questions and exemplary responses to model precise vocabulary and syntax. For example, in the "Explore 1—Determine Perimeter" activity, the following question and exemplary student response are provided: "Which perimeters were easiest to measure? Why? The easiest perimeters to measure were the ones for polygons with equal sides. In this case, the square's sides were all equal, so we could measure one side and add it four times or multiply it by four. Rectangles have opposite equal sides, which means we could measure and add the length and width sides together and then double the amount (or add them again)."

The "Speaking" section included in the "Language Connections" activities provides embedded teacher guidance to support the application of appropriate mathematical language to include vocabulary, syntax, and discourse that provide opportunities for students to hear, refine, and use math language with peers and develop their math language. For example, in the "Perimeter Scope," students discuss with a partner the following: "What does perimeter measure? Have students use the following sentence stem: 'Perimeter measures___.' Explain to your partners how you drew a model of the picture frame. Explain to your partners how you found the perimeter of the picture frame. With your partners, discuss the

following questions: What is the difference between perimeter and area? Why might Jacoby need to know the perimeter of his picture frame?"

The "My Math Thoughts" activities provide students with the opportunity to hear, refine and use math language with peers and develop their math language. For example, in the "Perimeter Scope," students are presented with the scenario: "Igor and Katarina are planning a garden for their school. Katarina says they need to find the perimeter of each shape to figure out how much fencing to buy." Students discuss their thinking with neighbors before writing their thoughts on paper. Students persevere through their thinking and use mathematical tools and models as necessary, including word banks, to write their answers in complete sentences, using correct spelling, grammar, and punctuation when applicable.

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 "Scope and Sequence" provides the TEKS mathematical process standards for each scope. This document lists both the content and process standards addressed in every "Explore" activity that is part of the scope. The inclusion of the process standards ensures that teachers can see how teachers can see how students are expected to apply the process standards alongside content objectives. For example, the "Explore 1–Estimation and Rounding" activity lists the content standards as 3.2C, 3.4B, and 3.4A. The process standards included are 3.1ACDE.

In the "Explore 2–Compatible Numbers" activity, students mentally estimate solutions to addition and subtraction problems by using compatible numbers. Students apply mathematics to problems arising in everyday life, society, and the workplace. For example, in the "Procedures and Facilitation Points," students are presented with the following scenario: "Today, we are going on a camping trip and need to buy supplies. We will mentally estimate the cost of supplies along the way to get an idea of how much we will spend."

The TEKS mathematical process standards are integrated appropriately into the materials, such as in the "Explore 1–The Base-Ten System" activity. Students describe the relationships found in the base ten place value system through the hundred thousands place. Students analyze mathematical relationships to connect and communicate mathematical ideas. Students look for patterns and practice counting to determine the total number of seeds. For each land size, students record an expression, a model, and the total number of seeds in their student journal.

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

The "Implementation Guide" explains how the TEKS mathematical process standards are included throughout the whole curriculum. It shows that these process skills help students learn how to solve problems, think carefully, and talk about math at every grade level. Instead of teaching these skills separately, the guide shows they are part of daily lessons through activities, talks, and tests. This makes sure the process skills are connected and used all year long. For example, in the "Explore 1–Parts of a Whole" activity, the process standard "Apply mathematics to problems arising in everyday life, society,

and the workplace" is connected when students work through the following scenario: "You and your family are going to dinner at a nice restaurant. Your friends will want to know every detail about your dinner." Students create models to show fractions such as what part of the window was washed at the restaurant.

At the beginning of each scope, the curriculum clearly outlines student expectations that include both TEKS content and process standards. These expectations describe the problem-solving, reasoning, and communication skills students will develop alongside mathematical concepts. By presenting these process standards upfront, the curriculum helps teachers and students understand how process skills are integrated and connected throughout the scope. For example, in the "Explore 1–Represent Problems with Diagrams" activity, the process standard "Apply mathematics to problems arising in everyday life, society, and the workplace" is integrated as students work through the following questions: "Have you ever participated in a fun run? What was it like? Why would a school want to have a fun run? What do you think fun run T-shirts would look like? What do you remember about strategies for adding and subtracting numbers?"

The "Scope and Sequence" provides the TEKS mathematical process standards for each scope. This document lists both the content and process standards addressed in every "Explore" activity that is part of the scope. The inclusion of the process standards ensures that teachers can see how teachers can see how students are expected to apply the process standards alongside content objectives. For example, the "Explore 1–Estimation and Rounding" activity lists the content standards as 3.2C, 3.4B, and 3.4A. The process standards included are 3.1ACDE.

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

The "Content Support" section in each scope or unit provides a description of how the mathematical process standards are incorporated and connected throughout the scope. For example, in the "Multiplication Models Scope," the process standard 3.1A is applied in the following way: "Students solve multiplication problems related to a wide variety of everyday life situations, such as stocking grocery store shelves, preparing for a camping trip, and comparing the cost of the same items at two different grocery stores."

The "Content Support" section of the "Division Models Scope" includes a description of how the mathematical process standards are incorporated and connected throughout the scope. For example, the process standard 3.1B is applied in the following way: "Students create models to help them analyze the information given, determine a solution through using mathematical tools, and come up with a solution to division problems."

The "Content Support" section of the "Area Scope" includes a description of how the mathematical process standards are incorporated and connected throughout the scope. For example, the process

standard 3.1C is applied in the following manner: "Students use tools such as models, colored tiles, and rulers when appropriate to solve area problems."

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

The "Scope and Sequence" provides an overview of the TEKS mathematical process standards for each lesson. This document lists both the content and process standards addressed in every "Explore" activity that is part of the scope. The inclusion of the process standards ensures that teachers can see how students are expected to apply the process standards alongside content objectives. For example, the "Explore 1–Estimation and Rounding" activity lists the content standards as 3.2C, 3.4B, and 3.4A. The process standards included are 3.1ACDE.

In the "Explore 2–Compatible Numbers" activity, students mentally estimate solutions to addition and subtraction problems by using compatible numbers. Students apply mathematics to problems arising in everyday life, society, and the workplace. For example, in the "Procedures and Facilitation Points," students are presented with the following scenario: "Today, we are going on a camping trip and need to buy supplies. We will mentally estimate the cost of supplies along the way to get an idea of how much we will spend."

The "Problem Based Task" lesson in each scope provides the students an opportunity to put the process standards into practice. Students work collaboratively to apply the knowledge and skills they have learned to an open-ended, real-world challenge. For example, in the "Perimeter Scope," students must solve the following problem: As a picture frame designer, they have been tasked with designing three frames for a new customer. The customer has asked the following to be included: "All 3 frames should be rectangles. Each frame should be a different size, measured in inches. Colors and patterns should be used in each frame design. Around one of the frames, they would like to use a special string of pearls that is 36 inches long."

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 "Explore" activities provide opportunities for hands-on tasks that support mathematical thinking by encouraging students to experiment with manipulatives, persevere through trial and error, and explain their reasoning. In the "Explore 1—Equal Groups and Repeated Addition" activity, students determine the total number of objects in a scenario using equal groups and repeated addition. This hands-on task supports mathematical thinking by encouraging students to create models of multiplication using manipulatives, drawings, and number sentences. In this same activity, the teacher helps students make sense of mathematics through the following prompts: "Why do you think we use multiplication? What are some ways we can model and solve a multiplication equation?"

The "Problem-Based Task" in each scope provides opportunities for students to think critically, apply strategies, and justify their solutions in real-world scenarios. These tasks encourage persistence through multi-step challenges and promote deep mathematical understanding by requiring students to model, reflect, and explain their reasoning. For example, in the scope "Division Models," the problem-based task has students work collaboratively to make a plan on how to use the pans to bake enough treats for the carnival. Students must also figure out how many of each treat will go in a treat bag to be sold at the carnival. The final plan is presented to the "Carnival Committee" or class.

The "Math Story" in each scope provides opportunities for students to think mathematically and persevere through solving problems. Real-world situations are presented, and students solve problems based on what they have read or heard. Partner discussions are embedded during the activity to support making sense of mathematics. In the scope "Represent and Interpret Fractions," the "Math Story—The New City Park" presents students with a situation in which they apply their knowledge of fractions to analyze a new city park design.

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 "Math Chat" section of the "Explore" activities provides questions and prompts where students share their thinking, compare strategies, and explain why different approaches work. These structured discussions promote flexible problem-solving and help students understand that math is not one-size-fits-all—there are often several valid methods for reaching a solution. For example, in the "Math Chat" section of the "Explore" activities in the "Multiplication Models Scope," students create different models to represent multiplication. Students explain the relationships between the models and how multiplication is shown in the different models.

The "Procedure and Facilitation Points" section of the "Explore" activities provides support for students in understanding, explaining, and justifying that there can be multiple ways to represent and solve problems and complete tasks. For example, in the "Procedure and Facilitation Points" section of the "Explore 4—Compose and Decompose Composite Figures" activity, students decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area. The teacher facilitates a whole-group discussion where different solutions are shared and students explain their strategies.

The "Daily Numeracy Scope" provides support in understanding, explaining, and justifying that there can be multiple ways to represent and solve problems and complete tasks. "The goal of Daily Numeracy is to empower students to reason with numbers in an accurate, efficient, and flexible way." The teacher displays a numeracy activity, invites students to think about what they see and how they would solve the problem mentally. "As students devise strategies to solve the problem, they discreetly signal to the teacher in the following ways: Closed fist to chest: 'I am still thinking.' Fist to chest, thumb up: 'I have a strategy.' During this time, students continue looking for different strategies. Fist to chest, 2–5 fingers: 'I have more strategies.'" The number of fingers displayed represents the number of strategies the student has. As students share their connections, the teacher writes the strategy on chart paper or the board. The teacher helps students articulate their thinking by asking clarifying questions that prompt students to find the meaning in their strategy, encourage them to seek different ways to prove their answers, and invite them to share different ways of "seeing the numbers."

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 "Accessing Prior Knowledge" activities include opportunities for students to make sense of mathematics as they do math with other students and the teacher. For example, in the "Multiplication Models Scope," students use repeated addition to find the total number of objects arranged in equal groups and write an equation to express the total as a sum of equal addends. The following prompts are provided as students work in pairs, small-groups, or whole-groups: "Have students read the prompt and

the four students' responses. Facilitate a class discussion about which number sentence is correct. This provides an opportunity to gather an understanding of prior student knowledge before beginning the lessons. Encourage students to support their answers, and check for understanding and misconceptions."

In the "My Math Thoughts" activities, students have the opportunity to write out their mathematical thoughts and ideas using several avenues. For example, in the "Division Models Scope," students write to respond to the following questions and prompts: "Draw a model to represent how Cindy can partition the candy worms. Find a classmate whose model looks different than yours. Why do both models work for this problem? When have you had to divide something equally to share with others?"

The "Explore" activities are designed to require students to make sense of mathematics through multiple opportunities to discuss math with other students and the teacher. For example, in the "Explore 2—Model Equivalence with Number Lines" activity, students determine whether fractions are equivalent using a number line. A discussion among the teacher and students is evident in the following prompts: "Explain that each Scenario Card describes a family dish that was enjoyed this year and last year. Direct students' attention to the Macaroni and Cheese Scenario Card, and read it aloud as a class. Prompt students to use the fraction tiles to create a model of the amount of macaroni and cheese left over from last year. Students should use the fraction tiles to partition their Number Line appropriately and then draw and label a point on the Number Line that represents this fraction using their dry-erase marker."

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 "Procedure and Facilitation Points" section of the "Explore" activities provides teacher support for guiding students to share their problem-solving approaches. For example, in the "Procedure and Facilitation Points" section of the "Explore 4—Compose and Decompose Composite Figures" activity, students decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area. The teacher facilitates a whole-group discussion where different solutions are shared, and students explain their strategies.

The "Problem-Based Task" in each scope provides teacher support in guiding students to reflect on their problem-solving approaches and promote deep mathematical understanding by requiring students to model, reflect, and explain their reasoning. For example, in the "Procedure and Facilitation Points" section of the "Explore 4—Compose and Decompose Composite Figures" activity, students decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area. The teacher facilitates a whole-group discussion where different solutions are shared, and students explain their strategies.

The "Math Chat" section of the "Explore" activities provides teacher support for guiding students to share and reflect on their problem-solving approaches in a whole-group format and provides closure to the daily lesson. For example, in the "Represent and Interpret Fractions" activity, the teacher facilitates a whole-group discussion with the following prompts and questions: "What was the relationship between the diagrams and the number lines? What is the relationship between the models you built and the fraction you recorded? What connections did you make between fractions and other math concepts you have learned?"

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

The "Content Support" in each scope outlines anticipated student misconceptions and provides specific language and strategies teachers can use to address them. For instance, in the "Multiplication Models Scope," a misconception included states: "Students may see arrays as a collection of individual objects and fail to see the rows or columns as equal groups." The following guidance to support teachers in providing explanatory feedback is provided: "Students use concrete models in conjunction with pictorial

representations to develop the concept of multiplication by using arrays. Concretely generating how many groups (rows or columns) and how many objects are in each group develops the foundational concept of multiplication. Arrays also provide opportunities in a later scope for students to physically represent the commutative property of multiplication (changing the orientation of the array). Students need to prove, for instance, that 6 × 3 equals the same product as 3 × 6."

The "Instructional Support" section in each of the "Explore" activities provides prompts and guidance to support teachers in providing feedback based on the student responses and anticipated misconceptions. For example, in the "Explore 3—Number Lines and Skip Counting" activity, students determine the total number of objects they have packed for their camping trip by representing multiplication problems using number lines and multiples. The following prompt and guidance is provided: "It may be helpful to allow students to use manipulatives, such as linking cubes, alongside their number lines to help model their thinking. Students may use linking cubes to help them represent the value of each jump on the number line and how that model relates to multiplication. As an extension, encourage students to move toward the abstract stage by removing the manipulatives toward the end of the problems and solving using just the number line model."

The "Procedure and Facilitation Points" section in each of the "Intervention" activities provides prompts and guidance to support teachers in providing feedback based on anticipated misconceptions. For example, in the "Supplemental Aids—Frames" activity, students use frames to visualize number concepts, single-digit addition and subtraction, and basic estimation and rounding. The following prompts and guidance on modeling how to use a frame is provided in anticipation of misconceptions: "Display the frame that best meets the students' needs. The Five Frame uses 5 as an anchor, and the Ten Frame uses 10 as an anchor. Explain that only one counter may be placed in each section of the frame. For early number concepts, start with the Five Frame before moving on to the Ten Frame. When the Ten Frame is used, explain to students that the first row should be filled first, moving left to right, before filling the second row."