Accelerate Learning Inc.

Spanish Mathematics, K

STEMscopes Texas Math–Kindergarten Spanish

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Full-Subject, Tier-1	**9798893533699**	**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	171	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 met.	3/3
1.1b	All criteria for guidance met.	2/2
1.1c	All criteria for guidance met.	2/2
1.1d	All criteria for guidance met.	2/2
1.1e	All criteria for guidance met.	2/2
—	**TOTAL**	11/11

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

The *Teacher Toolbox* includes a "Scope and Sequence" that outlines the specific order of math TEKS and concepts taught throughout the school year. It begins with the "Launch into Kindergarten Scope," which explores the habits of a mathematician as students engage in a variety of skills: counting and cardinality, recognizing numerals up to 10, numeral formation to 10, creating sets of objects to 10, sorting objects, describing relative location, and identifying two-dimensional shapes.

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 "Count Objects Scope" includes TEKS K.2A, K.2B, K.2C, and K.2D. A total of 10 instructional days is suggested to cover this scope.

Concepts taught are identified in each scope or unit name. Each scope or unit is further broken down into "Explore" activities. The "Explore" activity name provides a specific concept to be taught. For example, the "Join and Separate Scope" contains four "Explore" activities titled "Join and Separate," "Part-Part-Whole," "Join, Separate and Part-Part-Whole," and "Explain Addition and Subtraction Strategies."

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" in 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" explains how concepts to be learned in each scope connect to three overarching focus areas: "(1) developing an understanding of counting by knowing the number names and counting sequence and understanding cardinality by representing the total number of objects in a set; (2) developing an understanding of addition as joining and subtraction as separating by using the meaning of numbers to create strategies for solving problems and the relationship of these operations to counting; (3) identifying objects that can be measured and compared according to their measurable attributes."

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 "Compose and Decompose Numbers to 10 Scope" delves into the composition and decomposition of numbers up to 10. This is a building block for understanding a later scope on addition and subtraction.

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

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

The "Count Objects Scope" also includes a "Suggested Scope Calendar," which provides a protocol that teachers can follow when conducting lesson internalization.

The "Count Objects 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. Also, opportunities for inquiry guide students to formulate questions and design ways to explore in order to answer these questions. 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 students should 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 that reinforce in-class learning are provided in both English and Spanish.

The "Take Home Letter" provides the family 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 in to 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 to check for understanding. The questions 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 "Count Objects 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 "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 a "Tips and Tricks" section, 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," which 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 toward a diagnostic purpose while the "Evaluate" assessments can be used as either 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 questions in multiple-choice, fill-in-the-blank, and open-response types.

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 "Count Objects Scope" provides an "Interview Rubric" in the "Show and Tell" assessment activity to guide in interpreting student performance. The "Interview Rubric" also suggests interventions based on student performance on the tasks.

The "Measurement 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 are 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 includes reflection pages where students record observations of their learning. This allows students to become active participants in assessing their progress.

STEMscopes Math Spanish includes a "Teacher Observation Checklist," with which teachers can identify how the skill/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 "Compare Numbers to 10 Scope" includes frames as a supplemental aid that students use to visualize number concepts, single-digit addition and subtraction, and basic estimation and rounding.

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 "Compare Numbers to 10 Scope" includes the following guidance: "Allow students to have a scribe or work with a partner to help with the drawing part of the experience. This allows an increase in peer interaction and eliminates the need for drawing quickly. Alternatively, students could use a marker to create visible dots for the marshmallows."

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 "Compare Numbers to 20 Scope," an explanation of the following phrases is provided to teachers: "generate sets," "one more and one less," and "compare sets and numerals."

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 "Measurement Scope" includes "Picture Vocabulary" cards for the terms *capacity*, *compare*, *length*, and *weight*, which can be coupled with the student-friendly definitions provided in the "Content Support" section.

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 "Count Objects Scope" includes "Duck Pond" and "Feed the Fish" as interactive activities for students on grade level. Students above grade level can engage in "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" section provides a task or activity for students in need of a challenge. The "Explore 1" activity of the "Count Objects Scope" provides the following guidance: "If students need an additional challenge, ask them to identify the number of items when arranged differently. Encourage arrangements that allow students to identify the number by the grouping rather than needing to count each object."

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 "Count Objects Scope," the "Math Today" activity has students explore how lemurs stay cool on hot days by counting fruit and popsicles.

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 3" activity of the "Count Objects Scope" provides guidance to teachers in modeling and explaining the concept to be learned. For example, the third bullet states, "If students need additional help completing the Student Journals, model how to color in the starting number green, count, and then color in the ending number red."

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 "Compose and Decompose Numbers to 10 Scope" includes the following prompts and guidance: "Direct students' attention to the two bags of linking cubes: one bag with six blue linking cubes and another bag with six red linking cubes. Allow the students a few moments to discover the manipulatives and experience how they work with their partners," "Explain that students will pretend the linking cubes are the cupcakes with red or blue frosting," "Instruct students to work with their partners to use the linking cubes and the Cupcake Story Mats to determine all the different combinations of six," "Once students have had time to use the manipulatives to find the different ways to compose and decompose six, give each student a Student Journal."

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 "Join and Separate Scope" includes an exploration of concepts and opportunities for student discourse as instructional approaches. "Direct students' attention to their manipulatives and Cookie Plate Story Mats. Give them a few moments with their partners to discover the manipulatives and experience how they work. Project task 1 from the Task Cards. Read the problem aloud as students follow along. Give students a minute or two to solve the word problem on their own." 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/Math Story," "Problem-Based Task/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 under the "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 met.	1/1
3.3c	All criteria for guidance met.	8/8
3.3d	This guidance is not applicable to the program.	N/A
—	**TOTAL**	9/9

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

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

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

"Explore" activities include a "Language Support" section that provides implementation guidance to support teachers of bilingual/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, "Provide sentence structures for students to use during their group work: I counted _____ objects. I have the number _____. How many _____ do you have?" from the "Explore 1—Count Objects within 10" activity. Ideas to effectively use visual aids are also provided in the "Language Support" section of every "Explore" activity, such as, "Provide a visual of the following steps that are needed to complete the task: choose a bag, look at the number, fill it up with the same amount of items, and draw a picture." from the "Explore 1—Count Objects within 10" activity.

Each scope includes a "Language Connection" section in the "Explain Tab" 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 "Measurement Scope" provides the following prompts to address the

"Beginner Speaking Domain": "Which attribute can we measure in the cup (point) and pitcher (point)? Length, capacity, or weight (capacity)?" and "Color the attribute we can measure. (capacity)" Materials also guide students to "complete the following sentence frame: We can measure _____ using a cup and pitcher."

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/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?", and "What do you picture in your mind when you hear this word?" For instance, after students complete the "Explore 1—Compare Sets (Large Differences)" activity where they compare sets with large differences up to 20 by using comparative language, they would be able to make connections to the following "Picture Vocabulary" cards: "Equal to," "More Than/Greater Than," "Less Than/Fewer Than," "One More Than," "One Fewer Than."

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 "Compare Numbers to 20 Scope," the teacher facilitates a class discussion around this scenario: "Payton drew 8 hearts on a card she made for her mom. Ashlyn made a card for her mom and drew more hearts than Payton. Draw a model to show the number of hearts Ashlyn could have drawn on her card." 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 "Money Scope," students sort coins based on physical properties through a scenario read aloud by the teacher. Academic vocabulary used in this activity includes *nickel*, *penny*, *dime*, *quarter*, *coin*, and *money*.

"Explain Tabs" include 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 "Money

Scope," the teacher has coins available for students. The students then echo-read and discuss the words in the word bank. The teacher defines and provides examples as the students need. Finally, the teacher guides students to fill in the blanks, providing assistance and models as needed.

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 "Count Objects Scope," provide practice opportunities for students to count forward and backward up to 20. Students practice using objects and also without objects.

The "Evaluate" assessments, located in the "Count Objects Scope," provide practice opportunities for students to demonstrate they can count forward and backward up to 20. Students demonstrate that they can do so using objects first, and then they demonstrate they can count forward and backward without using objects.

The "Explain" activities, located in the "Count Objects Scope," also provide opportunities for students to count forward and backward up to 20. Students practice using objects and pictorial representations as they count forward and backward to 20.

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

The "Explore" activities, located in the "Count Objects Scope," provide practice opportunities for students to read, write, and represent numbers up to 20. Students first learn to read, write, and represent numbers up to 10, and then they progress to numbers up to 20.

The "Evaluate" assessments, located in the "Count Objects Scope," provide practice opportunities for students to demonstrate they can read, write, and represent numbers up to 20. The teacher provides prompts to students using a teacher prompt card and observes as they demonstrate their learning.

The "Explain" activities, located in the "Count Objects Scope," provide practice organizing counts and counting to 10. The task progresses to counting forward and backward up to 10. It progresses further to counting forward and backward up to 20, with and without objects.

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 among 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 can 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" activities in which previously learned skills and concepts are applied. "Partner Discussions" are another opportunity to apply previously learned skills and concepts.

The "Teacher 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 "Compare Numbers to 10 Scope" includes the following tasks: "After students have completed their Student Journals, bring the class together as a whole group. Ask students to share their strategies, and encourage them to ask each other questions and make connections. Encourage them to notice the similarities and differences in the processes they used to generate more or less."

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 "Compare Numbers to 10 Scope" includes the following Level 4 question: "Why would you need to generate sets or numbers more than or less than a given number outside of school?"

In the "Explore 5" activity of the "Data Analysis Scope," students draw conclusions from a variety of picture graphs. The second DOK-3 question in the "Math Chat" section prompts students to analyze the information in the survey to decide which picture graph is correct. "How did the survey chart help you decide which picture graph was correct at Station 5?"

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. For example, in the "Money Scope," students use sorting mats to model coin values and differences between pennies, nickels, dimes, and quarters.

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 "Join and Separate Scope," students engage in the following tasks: "Tell students they are going to do an activity where they practice joining and separating. Students will work in pairs and use a Story Mat and counters." "Pass out a Story Mat and a bag with the 5 counters to each set of partners." "Explain what a Story Mat is. It is a setting for math 'stories,' or word problems, to take place. In this case, it is a farm setting, complete with a barn and a tree. Tell students that they are to use their counters as 'actors' in the joining and separating problems they are to solve."

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 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 "Join and Separate Scope," students listen to a read-aloud story of a trip to the museum. During their visit, they must apply their understanding of addition and subtraction to engage with the story key points where they are prompted.

In the "Life Connections" section each scope, students apply their conceptual understanding to new problem situations and contexts. The teacher uses 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 "Join and Separate Scope," students engage with the following questions and tasks: "Orchestrate a conversation with the students by asking questions such as the following: How do zoo nutritionists join and separate animals' food? Does it seem difficult or easy to join and separate in this way? Why do you think it is important to be able to join and separate the food when feeding an animal? Is this a career you are interested in? Why or why not? How might a zoo nutritionist be creative when he or she prepares food?"

5.2 Development of Fluency

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

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

The "Fluency Builder" activities 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—Count Objects to Ten" activity has students playing a matching card game where they match numbers 1 to 10 with sets of objects. "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—The Playground" activity has students review previous or current grade-level content such as "counting objects," "identifying circle, triangle, and square," and "abab patterns."

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. In the "Daily Numeracy—Not Like the Others" activity, students engage in the following task: "Gather students together and project the Slideshow prompt of the day. Students should not have anything with them for this activity. Give students a minute of silent thought time as they look at the pictures on the prompt. Ask students relevant guiding questions. Listen to multiple student responses. Accept any answer with accurate reasoning. As students discuss which one is not like the others, ask the class if they agree or disagree."

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 "Join and Separate Scope," students do an activity where they practice joining and separating. Students work in pairs and use a Story Mat and counters.

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—Count Objects to Ten" activity has students playing a matching card game where they match numbers 1 to 10 with sets of objects. "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 Instruction" provides students the opportunity to practice the application of mathematical procedures within the lesson and/or throughout a unit. 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 and 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 "Join and Separate Scope" includes the "Skill Basics—Problem-Solving Model" activity that engages students in a problem-solving model to solve addition and subtraction problems. The teacher facilitates a discussion where students analyze the problem, make a plan, find a solution, and justify their solution. Students evaluate the procedures, processes, and solution for accuracy.

STEMscopes Math Spanish embeds mathematical DOK questions across all grades K–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 1—Join and Separate" activity includes the following DOK-4 question: "How can knowing how to join and separate help you at home?" 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 "Compose and Decompose Numbers to Ten Scope," the "Accessing Prior Knowledge" activity provides the following facilitation tip: "During the class discussion, have several students model their counting strategies. Look for students who take the bears out of the bag one at a time, touch each bear through the bag, make groups of 2 or 5, and so on."

The "Procedure and Facilitation Points" in each "Explore" activity offer 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—Compose and Decompose 6" activity, these prompts provide embedded support for the teacher: "Direct students' attention to the two bags of linking cubes: one bag with six blue linking cubes and another bag with six red linking cubes. Allow the students a few moments to discover the manipulatives and experience how they work with their partners." "Explain that students will pretend the linking cubes are the cupcakes with red or blue frosting." "Instruct students to work with their partners to use the linking cubes and the Cupcake Story Mats to determine all the different combinations of six." "Once students have had time to use the manipulatives to find the different ways to compose and decompose six, give each student a Student Journal."

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 "Compose and Decompose Numbers Scope," the following steps are provided: "Before the activity, ask students to count with you to six. As students count, instruct them to write the numerals on their whiteboards." "Place six counting bears of one color and six counting bears of another color in front of each student. Then ask students to count each group of bears." "Read the following scenario: Six bears are in the cave. What are all the different ways we can compose the 6 bears in the cave? Instruct students

to use their counting bears to compose six in different ways. Then instruct students to write the different combinations on their whiteboards using a sentence stem."

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" section 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 the why, which will lead into procedural implications connecting to the how. For example, in the "Compare Numbers to 10 Scope," the "Implications for Learning" section begins with students engaging in multiple experiences playing games with dice in order to begin recognizing dot patterns. This conceptual emphasis connects to procedural emphasis later when students circle keywords such as *less than*, *greater than*, and *equal to* to complete comparison statements.

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 "Join and Separate Scope" has students using concrete models and manipulatives to solve problems. The teacher asks questions as students use cookie cutouts to solve the problem: "How many cookies did Mia start with?" and "What is happening to the cookies in this problem?" The lesson progresses to the use of drawings representing cookies to solve other problems.

The "Explore 4" activity in the "Join and Separate Scope" has students continuing learning with more abstract representations. Students use manipulatives to solve problems along with a pictorial representation and then use a number sentence using only numbers and symbols to represent what happened in the word problem.

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.

The "Explore 1" activity in the "Count Objects Scope" has students connecting concrete objects to representational models and numeric concepts. Students begin by placing the correct number of manipulatives in bags that have a card with a number between 1 and 10. Next, students create drawings to represent the number of manipulatives in the bags. The lesson concludes with a teacher-facilitated discussion during which students explain their work.

"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 "Three-Dimensional Solids 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 the different ways that three-dimensional solids can be sorted. The teacher facilitates the discussion with the following questions: "What are some ways we could sort these shapes?" "There are 2 shapes shown that do not belong with the other 4. Can you tell me which ones they are, and why?"

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 Kindergarten 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 Strategy—Fish Race," students receive a word or definition from the "Fish Race Answer Key" that relates to what the craft stick tells the team to do. If "Act it out" is chosen, then the team has to act out the meaning of the word.

The "Explore 1—Sort Coins" activity has students use a magnifying glass to identify the different characteristics (size, color, type) to sort coins. Students use a sorting mat to sort their bag of coins in different ways. After the activity, the teacher facilitates a "Math Chat" discussion using the following questions and prompts: "How did we sort the coins? Hold up a quarter. What are the characteristics of this coin? Why do you think some coins have smooth edges and some have rough edges?" Academic math language used in this lesson includes *coin*, *dime*, *money*, *nickel*, *penny*, and *quarter*.

The "Picture Vocabulary" slides are provided in every scope along with a teacher-led discussion to support academic language development. For example, in the "Join and Separate Scope," slides for the following words are provided: *add*, *difference*, *explain*, *join*, *separate*, *solve*, *subtract*, *sum*, and *total*. Each slide includes a visual 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 add their pictures or drawings to their "Interactive Vocabulary Journals." Teachers create math word walls in the classroom with the "Student Handout" materials that are provided.

"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 "Compare Numbers to 20 Scope," the teacher shares the scenario: "Steven made 5 baskets in his basketball practice. Zane made the same number of baskets. Draw basketballs to show how many baskets Zane made." The teacher then facilitates a class discussion about their drawings and asks the questions: "How did you know how many _____ to draw? Are there other numbers of _____ you could have drawn? How do you know those numbers would have been appropriate?"

The "Math Chat" section for each scope provides teacher guidance to scaffold and support the students' development and use of academic mathematical vocabulary. For example, in the "Explore 2—Generate More or Less" activity, students generate a set that represents a number that is more than, less than, or equal to a given number up to 20. The teacher facilitates a discussion using the following questions: "What strategies can you use to generate a set that is more or less than a given number? What strategies can you use to generate a number that is one more or one less than a given number?"

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 responses to model precise vocabulary and syntax. For example, in the "Explore 1—What Can Be Measured? Identify Measurable Attributes" activity, the following question and exemplar student response is provided: "What are the different ways we can measure an object? I noticed we can measure the weight and the height of all of the items. I could compare the object to another object in the container to see which item was longer, weighed more, or held more water."

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 "Measurement Scope," students discuss with a partner the following: "What attribute can be measured in your drawing and the lemonade glass? How do you know? Can you think of any other examples of measuring capacity? What attribute can be measured in your drawing and the tennis ball? How do you know? Can you think of any other examples of measuring weight?"

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 "Measurement Scope,"

students are presented with the scenario: "Pam took a water jug to school for a science project. Her teacher asked her to bring the jug that would hold the most water. Color in the water jug that Pam took to school." 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 students are expected to apply the process standards alongside content objectives. For example, the "Explore 1—What Can Be Measured?" activity lists the content standards as K.7A and K.7B. The process standards included are K.1C and F.

In the "Explore 2—Compare Length" activity, students use direct comparison to compare the lengths of different footprints and objects around the classroom. Students apply mathematics to problems arising in everyday life, society, and the workplace. For example, in part one of the "Procedures and Facilitation Points," students compare each suspect's footprint to the evidence footprint and discuss what they notice with their group.

The TEKS process standards are integrated appropriately into the materials, such as in the "Explore 1—Compare Sets (Large Differences)" activity. Students compare sets with large differences up to 20 by using comparative language. Students are provided 10 frames and linking cubes to compare sets and then transition to a work mat. The students use manipulatives, drawing of objects, making tally marks, and writing numerals.

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—What Can Be Measured? Identify Measurable Attributes" activity, process standard "Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math,

estimation, and number sense as appropriate, to solve problems" is connected when students explore the objects provided and determine which can be measured and how.

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—Generate More or Less" activity, the process standard "Apply mathematics to problems arising in everyday life, society, and the workplace" is integrated by the discussion of the following scenario: "You and your family are on a camping trip with some friends. One of your favorite evening treats is a warm, gooey s'more. Yum! Your mom has asked you to help her prepare sticks with marshmallows on them. Your job will be to count how many marshmallows are on the sticks your mom has already prepared. Then you will help prepare sticks of marshmallows for your friends. Can you help your mom get ready to enjoy s'mores around the campfire?"

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 students are expected to apply the process standards alongside content objectives. For example, the "Explore 1—What Can Be Measured?" activity lists the content standards as "Give an example of a measurable attribute of a given object, including length, capacity, and weight" and "Compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference." A process standard included is "Analyze mathematical relationships to connect and communicate mathematical ideas."

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 TEKS mathematical process standards are incorporated and connected throughout the scope. For example, in the "Count Objects Scope," the process standard K.1A is applied in the following way: "Students represent numbers to 20 in everyday life, society, and workplace situations, such as helping the teacher by counting objects in bags and checking the quantity, organizing and counting collections of items in a math cabinet, and noticing patterns in the counting sequence as they count with elevator buttons and subway station cards."

The "Content Support" section of the "Compose and Decompose Numbers to 10 Scope" includes a description of how the TEKS mathematical process standards are incorporated and connected throughout the scope. For example, the process standard K.1B is applied in the following way: "Students

use story mats and manipulatives to plan, test, and determine their solutions. They justify and evaluate the reasonableness of the solution by discussing the math chat questions."

The "Content Support" section of the "Measurement Scope" includes a description of how the TEKS mathematical process standards are incorporated and connected throughout the scope. For example, the process standard K.1C is applied in the following manner: "Students use a variety of tools, including real objects, manipulatives, pictures, and journals, to solve problems and use estimation to identify and compare measurable attributes."

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—What Can Be Measured?" activity lists the content standards as "Give an example of a measurable attribute of a given object, including length, capacity, and weight" and "Compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference." A process standard included is "Analyze mathematical relationships to connect and communicate mathematical ideas."

In the "Explore 2—Compare Length" activity, students use direct comparison to compare the lengths of different footprints and objects around the classroom. Students apply mathematics to problems arising in everyday life, society, and the workplace. For example, in the first part of the "Procedures and Facilitation Points," students compare each suspect’s footprint to the evidence footprint and discuss what they notice with their group.

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 "Compare Numbers to 10 Scope," students must solve the following problem: "The sticker company needs help creating stickers. They do not want more than 10 stickers on each sheet."

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 "Skill Basics—Count Sets of Objects to 5" activity, students represent the number five using number cards and manipulatives. This hands-on task supports mathematical thinking by encouraging students to experiment with combinations that total five and then share it with the class. In this same activity, the teacher helps students make sense of mathematics through the following prompts: "What does each dot on each Number Card represent? Show me the card with the number.... Show me a set of that many objects."

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 multistep challenges and promote deep mathematical understanding by requiring students to model, reflect, and explain their reasoning. For example, in the "Represent Numbers to at Least 20 Scope," the "Problem-Based Task" has students work collaboratively to complete a math story and represent the numbers that make up the story. Groups present their story and any challenges encountered. Students explain their thinking (in writing or through drawings), connect counting with quantities, and understand math concepts within a meaningful context.

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 "Represent Numbers to at Least 20 Scope," the "Math Story—What a Mess!" presents students with a situation in which they organize toys in boxes using knowledge of representing numbers to 20.

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 1—Compose and Decompose 6" activity, students share different representations to make the number six. Students also explain what they noticed about the numbers that make six.

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—Generate Sets of Objects: Patterns in the Teens" activity, students generate a representation of cupcake orders by using cupcake cutouts and cupcake ten frames as they determine patterns in numbers in the teens. 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 and 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 "Count Objects Scope," students count objects using one-to-one correspondence. The following prompts are provided as students work in pairs: "Instruct students to take turns counting the candy aloud for their partners and recording the total number of pieces of candy on their Student Handouts. Facilitate a class discussion about their counting strategies. 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 "Compose and Decompose Numbers to 10 Scope," students circle visual objects to show one way to compose a number. Students also fill in a blank and draw a picture to show other ways of composing a number. This activity encourages students to process and make sense of the math completed, deepening understanding through multiple opportunities in writing.

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 4—Collect Data and Create Picture Graphs" activity, students survey their classmate’s favorite ice cream. They use this data to create a picture graph. A discussion among the teacher and students is evident in the following prompts: "After the survey is completed, students meet with their partners to count the number of votes for each flavor. Monitor and talk with students as needed to check for understanding by using the following guiding questions: What does each check mark represent? How can we figure out how many classmates like each flavor? How many classmates chose chocolate? How many classmates chose vanilla?"

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—Generate Sets of Objects: Patterns in the Teens" activity, students generate a representation of cupcake orders by using cupcake cutouts and cupcake ten frames as they determine patterns in numbers in the teens. 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 scope "Represent Numbers to at Least 20," the "Problem-Based Task" has students work collaboratively to complete a math story and represent the numbers that make up the story. Groups present their story and challenges encountered. Students explain their thinking (in writing or through drawings), connect counting with quantities, and understand math concepts within a meaningful context.

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 "Explore 1—What Can Be Measured? Identify Measurable Attributes" activity, the teacher facilitates a whole-group discussion with the following prompts and questions: "What were some of the measurable attributes you noticed about the different garage sale items? What are the different ways we can measure an object? What did you notice about the items that can be measured by capacity or how much they can hold?"

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 "Money Scope," a misconception included states: "Some students may think all coins are the same regardless of size and color." The following guidance to support teachers in providing explanatory feedback is provided: "Students can use crayons and paper to make rubbings of both sides of pennies, nickels, dimes, and

quarters. Students can then use real coins (or coin replicas) to match the rubbings with the correct coins. They can verbalize which coin matches with each rubbing."

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 2—Compose and Decompose 7" activity, students compose and decompose the number seven by using objects and pictures. The following prompt and guidance is provided: "When students are sharing their combinations, it is important to redirect students quickly if they say ‘makes seven,’ and have them say ‘is equal to seven’ or ‘is the same as seven,’ as these terms can cause confusion later when students are adding and subtracting."

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."