Accelerate Learning Inc.

Spanish Mathematics, 1

STEMscopes Texas Math–Grade 1 Spanish

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Full-Subject, Tier-1	**9798893533705**	**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	152	Flags Addressed	Flags in Report	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	26 out of 26	100%
2. Progress Monitoring	26 out of 26	100%
3. Supports for All Learners	25 out of 25	100%
4. Depth and Coherence of Key Concepts	19 out of 19	100%
5. Balance of Conceptual and Procedural Understanding	41 out of 41	100%
6. Productive Struggle	22 out of 22	100%

Breakdown by Suitability Noncompliance and Excellence Categories

SUITABILITY NONCOMPLIANCE FLAGS BY CATEGORY	IMRA REVIEWERS	PUBLIC	Flags NOT Addressed by November Vote
1. Prohibition on Common Core	2	0	0
2. Alignment with Public Education's Constitutional Goal	0	0	0
3. Parental Rights and Responsibilities	0	0	0
4. Prohibition on Forced Political Activity	0	0	0
5. Protecting Children's Innocence	0	0	0
6. Promoting Sexual Risk Avoidance	0	0	0
7. Compliance with the Children's Internet Protection Act (CIPA)	0	0	0

SUITABILITY EXCELLENCE FLAGS BY CATEGORY	IMRA REVIEWERS
Category 2: Alignment with Public Education's Constitutional Goal	2
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 Texas Essential Knowledge and Skills (TEKS) and concepts taught throughout the school year.

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. The course starts with the "Launch into Grade 1 Scope," with a total of 20 instructional days 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 "Money Scope" has four "Explore" activities: "Sort and Identify Coins," "Values of Coins," "Relationships Among Coins," and "Count a Collection of Coins."

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 the overarching three focus areas: "(1) developing an understanding of place value and applying this understanding to the relationships of our numeration system; (2) extending students' understanding of addition and subtraction beyond the actions of joining and separating to include comparing and combining and using the properties of operations and the relationships between addition and subtraction to solve problems; and (3) classifying, sorting, composing, and decomposing two-dimensional shapes and three-dimensional solids and moving from informal to more formal geometric language."

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

The "Addition and Subtraction Strategies Scope" introduces students to strategic thinking in mathematics, emphasizing the use of basic fact strategies to efficiently solve addition and subtraction problems within 20. This sets the stage for performing mental math with greater efficiency in later scopes, such as the "Addition and Subtraction Problem Solving Scope."

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

The "Add and Subtract Within 10 Scope" includes a *Teacher Guide* with defined protocols for teaching the scope, student expectations, background content knowledge, academic vocabulary, and vertical alignment.

The "Add and Subtract Within 10 Scope" also includes a "Suggested Scope Calendar," which provides a protocol that teachers can follow when conducting lesson internalization.

The "Add and Subtract Within 10 Scope" also includes a "Content Support" that 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 are broken down into 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 "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.

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.

The 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 "Add and Subtract Within 20 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 "Data Analysis 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 "Fractions 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 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 "Addition and Subtraction Strategies 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 "Addition and Subtraction Strategies Scope" includes the following guidance: "Rather than the rekenrek, some students may benefit from using a different visual aid. Consider providing a Hundreds Chart and at least 20 counters. Students can use the counters to show how they are joining the 2 numbers on the Lemonade Orders. This will help them see that a number in the teens is equal to a complete row of 10 plus some more."

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 "Time Scope," an explanation of the following phrases is provided to teachers: "hour hand clocks," "analog clocks (hour and minute hand)," and "digital clocks and analog clocks."

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 "Time Scope" includes picture vocabulary cards for the terms *analog clock*, *clock*, *digital clock*, *half hour*, *hour*, *hour hand*, *minute hand*, *o'clock*, and *time*, 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 "Fractions Scope" includes "Share the Cookie" 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 "Fractions Scope" provides the following guidance: "Consider challenging students to practice different ways to partition in equal fair shares of halves or fourths using a geoboard, where students can use rubber bands to show where to divide, or fair share, on a variety of rectangles."

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 "Fractions Scope," the "Math Today" activity has students explore how fractions play a role in the Pakistan Holi Festival.

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 "Add and Subtract within 20 Scope" provides guidance to teachers in modeling and explaining the concept to be learned. For example, the fourth bullet states, "If students need additional support to create their concrete model, model a think-aloud strategy. Read the Order Card aloud slowly, summarize key information, demonstrate the process using a ten frame, and transfer the information onto the Student Journal. Act out the Order Cards to help determine the action in the word problem."

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 "Fractions Scope" includes the following prompts and guidance: "Distribute a half-sheet of construction paper and a marker to each student." "Explain to students that the half sheet represents the cake. Allow students a few moments to discover the manipulative and experience how it works with their groups." "Instruct students to decide how they will partition the cake into two fair shares or equal parts. Encourage students to discuss and explore how many different ways of partitioning with their groups. Once they have decided how to partition, ask students to fold the construction paper and draw a line where the cake needs to be divided."

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 "Data Analysis Scope" includes an exploration of concepts and opportunities for student discourse as instructional approaches. "Distribute a Student Journal to each student. Instruct students to record two of the sorts completed with their groups. Students will add a title, label the categories, and draw tally marks to show the number in each category. After students have completed their Student Journals, bring the class together as a whole group. After the Explore, invite the class to a discussion to share their observations and learning." 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 the teacher can use during the lesson, such as, "To join, I began with ___ and then counted ____, ____, ____ . . ." from the "Explore 1—Join and Separate—Result Unknown (to 20)" activity. Ideas to effectively use visual aids are also provided in the "Language Support" section of every "Explore" activity, such as "Model joining and separating using manipulatives. Call attention to the actions of joining and separating on a number chart. If needed, provide students with a 1–20 number chart." from the "Explore 1—Join and Separate—Result Unknown (to 20)" activity.

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 Data Analysis Scope provides the following prompts to address the "Advanced Speaking" Domain:

"How could you sort these buttons into categories? What category labels could you use? How did you record the number of buttons in each category?"

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?", "What do you picture in your mind when you hear this word?" For instance, after students complete the "Explore 1—Sort and Organize" activity where they identify different ways animals can be sorted, the titles and categories for the sort, and record their data using tally marks and a T-chart, they would be able to make connections to the following "Picture Vocabulary" cards: "Answer Questions," "Bar-Type Graph," "Collect," "Data," "Generate Questions," "Organize," "Picture Graph," "Sort," "T-Charts," and "Tally Marks".

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 "Data Analysis Scope," the teacher facilitates a class discussion around the scenario: "Someone's little brother/sister came into the room last night and made a mess of the manipulatives in our classroom. Some of them are missing. Help clean up the mess, and figure out what has been misplaced." This supports comprehension, builds oral language, and prepares students for new academic vocabulary and content through culturally relevant connections.

"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 "Two-Dimensional Shapes 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. Let's point to the shapes and name each shape. Say the names of the shapes altogether as a group. Read each statement, guiding students to the word bank. Which of the words in the word bank best fits the blank? Point to the word bank. Allow students to share possible questions."

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 to 120 Scope," provide practice opportunities for students to develop an understanding of place value and apply this understanding to the relationships of our numeration system. Students generate numbers greater than or less than 120 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 to 120 Scope," provide practice opportunities for students to demonstrate they can generate numbers greater than or less than 120. Students demonstrate that they can also compare numbers using spoken and written language.

The "Explain" activities, located in the "Compare and Order Numbers to 120 Scope," also provide opportunities for students to generate numbers greater than or less than 120 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, located in the "Compare and Order Numbers to 120 Scope," provide practice opportunities for students to read, write, and represent numbers greater than or less than up to 120. Students progress through using objects to pictorial models and place value to compare and order numbers.

The "Evaluate" assessments, located in the "Compare and Order Numbers to 120 Scope," provide practice opportunities for students to demonstrate they can read, write, and represent numbers greater than or less than up to 120. 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 to 120 Scope," provide practice generating numbers greater than or less than up to 120, 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 it 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 "Add and Subtract Within 10 Scope" includes the following tasks: "Give each student a Student Journal. Ask students to record a pictorial model of their ten frames. Then, have them write a number sentence and the solution to the problem. . . . Have students rotate through all 8 stations. Once students have completed all 8 stations and the Student Journal, 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 solve each problem."

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 "Add and Subtract within 10 Scope" includes the following Level 4 question: "When would you solve joining or separating problems at home?"

In the "Explore 1" activity of the "Add and Subtract within 10 Scope," students use objects and pictorial models to act out joining and separating problems where the result is unknown. The second DOK-3 question in the "Math Chat" section prompts students to analyze and evaluate their answers. "How can you check to see whether you wrote the correct number of treats for your answer?"

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 "Addition & Subtraction Problem Solving Scope" prompts students to use linking cubes, counters, or

drawings/strip diagrams/number lines to model addition and subtraction problems. They create these models independently and then justify their solutions, with teacher prompts.

A "Foundation Builder" activity in each scope challenges students to create models to represent mathematical situations. Students use manipulatives to model and solve problems presented during the teacher's slideshow. For example, in the "Addition & Subtraction Problem Solving Scope," students engage in the following tasks: "Give each student the Student Handout. Hand out a bag of counters to each pair, and allow students to solve the problems with their partners. Students will record their answers on the Student Handout."

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 "Money Scope," students listen to a read-aloud titled "My First Lemonade Stand." As they listen to / read the story, they must engage at key points to help solve a problem around the value of coins.

In the "Life Connections" section of each scope, students apply their conceptual understanding to new problem situations and context. 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 "Money Scope," students engage with the following tasks: "Orchestrate a conversation with the students by asking questions such as the following: What are the names and values of the coins? What could you do to earn an allowance? How do you know how much money you need to save? If two people wanted to purchase an item that costs the same, will they have to use the same coins? Is it better to know what you want to buy before you go or to save first and then choose what you want to buy? What type of coins would you want the most when saving to buy something and why?"

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—Add and Subtract within 10 with Pictorial Models and Number Sentences" activity has students play a card matching game. Students match the pictorial model card with the correct number sentence. The dealer gives each player five cards and places all other cards facedown in a pile. Play moves clockwise. Each player chooses one card from their hand and asks another player for a match. Matching pairs also have matching fish images. If someone asks a player for a card in their possession, the player must give it to them. If the player does not have that type of card, the opponent must "go fish" by taking a card from the facedown pile. Players put any matches they receive faceup on the table in front of them. The game continues until all hands are empty and there are no more cards to be drawn.

"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. In the "Spiraled Review—Swim Lessons" activity, students review previous or current grade-level content such as "number symbol to word match," "comparing numbers," "less than," and "addition within 10."

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 engage in the following task. Students are gathered together and 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 "Add and Subtract within 20 Scope," students do an activity where they solve a problem (using the linking cubes). Students draw a pictorial model and write a number sentence to represent the problem.

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—Add and Subtract within 10 with Pictorial Models and Number Sentences" activity has students play a card matching game. Students match the pictorial model card with the correct number sentence. The dealer gives each player five cards and places all other cards facedown in a pile. Play moves clockwise. Each player chooses one card from their hand and asks another player for a match. Matching pairs also have matching fish images. If someone asks a player for a card in their possession, the player must give it to them. If the player does not have that type of card, the opponent must "go fish" by taking a card from the facedown pile. Players put any matches they receive faceup on the table in front of them. The game continues until all hands are empty and there are no more cards to be drawn.

The daily "Small-Group Instruction" 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 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 "Addition and Subtraction Problem Solving 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 5—Determine the Unknown Whole Number" activity includes the following DOK-3 question: "What strategy helped you determine the unknown number?" 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 "Fractions Scope," the "Accessing Prior Knowledge" activity provides the following facilitation tip: "In addition to hanging the Name Posters around the classroom, project them under a document camera and color-code the words/cards to support struggling readers."

The "Procedure and Facilitation Points" in each scope 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—Partition Shapes" activity, the following embedded support is provided: "Give each student a Student Journal and ask students to record how they partitioned their cake into two fair shares. . . . Invite students to look at the cake again by providing a new half-sheet of construction paper. . . . Read the following scenario to the class: 'Oh no! I forgot. Each dog gets to invite a friend, so there will be four dogs and each dog needs a piece of cake. Can you help me decide how to divide the cake into four fair shares or equal parts?' . . . Instruct students to decide how they will partition the cake into four fair shares or equal parts. Encourage students to discuss and explore how many different ways of partitioning with their groups. Once they have decided how to partition, ask students to fold the construction paper and draw a line where the cake needs to be divided."

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 "Fractions Scope," the following steps are provided: "Have students work in pairs. Each pair should

receive two sets of the Shape Cards. Instruct students to fold each shape to partition them into two equal parts and four equal parts (if possible). Watch and listen to each pair as they partition the shapes."

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 why, which will lead into procedural implications connecting to the how. For example, in the "Fractions Scope," the "Implications for Learning" section begins with students engaging in multiple experiences partitioning concrete objects by folding or cutting to create equal parts. This conceptual emphasis connects to procedural emphasis later when students draw lines to partition shapes on paper.

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.

In the "Explore 1" activity in the "Length Scope," students use concrete models and manipulatives to solve problems. Students begin by comparing the length of two strings to the length of objects in the classroom. Objects are sorted as either longer than or shorter than each of the strings. Students record their observations by creating drawings to represent their findings in the Student Journal.

In the "Explore 3" activity in the "Length Scope," students learn more abstract representations. Students measure the length of an earthworm representation by using two different units of two different lengths and describe how and why the measurements differ.

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" activities in the "Add and Subtract within 10 Scope" have students connecting concrete objects to representational models and numeric concepts. Using ten-frames and counters, students represent different scenarios provided on task cards. The "Explore" activities progress to using number sentences to represent the scenarios in the task cards. Throughout the "Explore" activities, the teacher facilitates discussions where 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 "Compose and Decompose Numbers to 120 Scope," there are five anchor chart activities—one for each of the five "Explore" activities. After the "Explore 1" activity, students record on the anchor chart how many tens and ones make up two different sets of objects. The teacher facilitates the discussion with the following questions: "How many tens are in the first collection? How many ones are in the first collection? How many tens are in the second collection? "How many ones are in the second collection?"

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 1 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 are provided with 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 and Identify Coins" activity has students sort and identify U.S. coins, including pennies, nickels, dimes, and quarters. Each pair of students receives a cup with coins (real, manipulative, and picture coins), a sorting mat, a dry-erase marker, and a magnifying glass. Students sort the cup of coins on the sorting mat and use the magnifying glasses to observe each group of coins' attributes a little more closely. After the activity, the teacher facilitates a "Math Chat" discussion using the following questions and prompts: "Are all quarters exactly the same? Explain. What attributes do pennies and nickels have in common? What do you notice about the thickness of the coins?" Academic vocabulary 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 "Money Scope," picture vocabulary slides for the following words are provided: *cent symbol*, *coin*, *dime*, *money*, *nickel*, *penny*, *quarter*, and *write*. 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 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 "Add and Subtract Within 20 Scope," students use the linking cubes to solve each problem. Students draw pictorial models and write number sentences to represent the problem in their "Student Handouts." The teacher encourages students 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—Join and Separate—Result Unknown (to 20)" activity, students use objects and pictorial models to solve problems involving joining and separating to 20, where the result is unknown. The teacher facilitates a discussion using the following questions: "What strategies did you use to solve the problems? Which strategy was used to perform addition? How do you know?"

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 exemplar responses to model precise vocabulary and syntax. For example, in the "Explore 1—Length Concept?" activity, the following question and student response are provided: "When might you need to determine the length of something in real life? On field day, when students do the long jump, we need to measure how far each student jumped to see who jumped the farthest."

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 "Length Scope," students discuss with a partner the following: "Share with your partners an object that is longer than the writing tools. Share with your partners an object that is shorter than the writing tools. Can you think of more things that are longer or shorter than the writing tools? Why do you think that is? What are the rules for when you measure?"

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 Length Scope, students are

presented with the scenario: "Becca measured the arrow shown using small paper clips. Measure the arrow like Becca did with small paper clips, and write how long it is." 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—Join and Separate—Result Unknown (to 20)" activity lists the content standards as 1.3B, 1.3E, and 1.5D. The process standards included are 1.1A, 1.1B, 1.1D, 1.1F.

In the "Explore 2—Join and Separate—Change Unknown (to 20)" activity, students use objects and pictorial models to act out joining and separating problems where the change is unknown. Students create and use representations to organize, record, and communicate mathematical ideas. For example, in the "Procedures and Facilitation Points," students draw beads on the chenille stems to create a pictorial model of each bracelet. Students will write a number sentence to answer the question from each Task Card.

The TEKS process standards are integrated appropriately into the materials, such as in the "Explore 1—Hour-Hand Clocks" activity. Students determine the time by analyzing the location of the hour hand on an analog clock. Students apply mathematics to problems arising in everyday life, society, and the workplace. For example, in the "Procedures and Facilitation" section, students are presented with this real-life scenario: "The Gulf Coast Winter Swim Meet is happening soon. The meet directors are hard at work planning the schedule of events. They need your help creating clocks to be posted in each team's waiting area. The clocks will help swimmers know when their event is getting close and when to head to the ready bench. Can you help the directors prepare the clocks?"

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—Basic Fact Strategies—Use 10 for Addition" 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 come up to the "orders table" and choose one lemonade order from the plastic cup to complete correctly and quickly. Students are encouraged to think of the fastest way to add the two ingredients by having them make a ten with the rekenrek.

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—Partition Shapes" 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: "Today is a special day. It is both of my dogs' birthdays. You heard that right. My two dogs have the same birthday. For their birthday, I need you to help me design a dog-friendly cake for them. Just remember, I will have to divide it into two shares, and those shares have to be equal. We do not want either one of the dogs to get upset if the other one gets more cake. Can you help me?"

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. 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—Join and Separate—Result Unknown (to 20)" activity lists the content standards as 1.3B, 1.3E, and 1.5D. The process standards included are 1.1A, 1.1B, 1.1D, 1.1F.

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 "Data Analysis Scope," the process standard 1.1A is applied in the following way: "Students analyze data in everyday life, society, and workplace situations, such as organizing animals on a ranch, helping to plan for field day, and planning activities for teachers."

The "Content Support" section of the "Fractions Scope" includes a description of how the TEKS mathematical process standards are incorporated and connected throughout the scope. For example, the process standard 1.1B is applied in the following way: "Students use sorts, objects, and a variety of

materials 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 "Time Scope" includes a description of how the TEKS mathematical process standards are incorporated and connected throughout the scope. For example, the process standard 1.1C is applied in the following manner: "Students use a variety of tools, including manipulatives, task cards, journals, and virtual manipulatives, to solve problems and use estimation and number sense to tell time to the hour and half hour."

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—Join and Separate—Result Unknown (to 20)" activity lists the content standards as 1.3B, 1.3E, and 1.5D. The process standards included are 1.1A, 1.1B, 1.1D, 1.1F.

In the "Explore 2—Join and Separate—Change Unknown (to 20)" activity, students use objects and pictorial models to act out joining and separating problems where the change is unknown. Students create and use representations to organize, record, and communicate mathematical ideas. For example, in the "Procedures and Facilitation Points," students draw beads on the chenille stems to create a pictorial model of each bracelet. Students will write a number sentence to answer the question from each task card.

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 "Addition and Subtraction Strategies Scope," students must solve the following problem: "Your team needs to create balanced equations. Think of an equation to solve. Use the seesaws on the next page to model how to create equations that are equal."

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—Join and Separate" activity, students use objects and pictorial models to solve problems involving joining and separating to 20 where the result is unknown. This hands-on task supports mathematical thinking by encouraging students to create a concrete model of scenarios using the "Double Ten Frame Mat" and color tiles. In this same activity, the teacher helps students make sense of mathematics through the following prompt: "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 solve each problem."

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 "Add and Subtract within 20 Scope," the "Problem-Based Task" has students work collaboratively to analyze toy car collections of different students by identifying differences and totals in toy car collections. Groups present their story and the challenges encountered. Students explain their thinking (in writing or through drawings) 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 "Compose and Decompose Numbers to 120 Scope," the "Math Story—Saturdays with Aunt Nora!" presents students with a situation in which they compose numbers in different ways such as the standard and expanded form.

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 4—Part-Part-Whole—Whole or Part Unknown (to 20)" activity, students share different strategies they used to solve for the unknown in the problem. Students also explain how they proved their solution using a number sentence.

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 1—Partition Shapes" activity, students partition shapes into two or four equal parts. The teacher facilitates a whole-group discussion where different solutions are shared and explain their strategy in partitioning the shapes into halves and fourths.

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 "Add and Subtract Within 20 Scope," students solve addition and subtraction problems using counters and pictorial models. The following prompts are provided as students work in pairs: "Instruct students to use the linking cubes to solve each problem. Ask students to draw pictorial models and write number sentences to represent the problem on their Student Handouts. Pay close attention to the steps that the students are using, both

to join and separate numbers. Facilitate a class discussion about addition and subtraction. 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 "Addition and Subtraction Problem Solving Scope," students write a story problem that represents a number sentence, represent it with a model (number line or diagram), and draw a picture to solve. 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 1—Partition Shapes" activity, students explore how to partition different shapes into two and four fair shares, or equal parts. A discussion among the teacher and students is evident in the following prompts: "Explain to students that the half sheet represents the cake. Allow students a few moments to discover the manipulative and experience how it works with their groups. Instruct students to decide how they will partition the cake into 2 fair shares or equal parts. Encourage students to discuss and explore how many different ways of partitioning with their groups. Once they have decided how to partition, ask students to fold the construction paper and draw a line where the cake needs to be divided."

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 1—Partition Shapes" activity, students partition shapes into two or four equal parts. The teacher facilitates a whole-group discussion where different students share and explain their strategy in partitioning the shapes into halves and fourths.

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 "Add and Subtract within 20 Scope," the "Problem-Based Task" has students work collaboratively to analyze toy car collections of different students by identifying differences and totals in toy car collections. Groups present their story and challenges encountered. Students explain their thinking (in writing or through drawings) 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 3—Compare—All Types (to 20)" activity, the teacher facilitates a whole-group discussion with the following prompts and questions: "How did you solve the problems? Have two students share different strategies for solving a problem and discuss the similarities and differences. Discuss why both strategies worked. Can you use addition and subtraction to solve the same problem? How?"

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 "Add and Subtract within 10 Scope," a misconception included states: "Students may not recognize that addends can be placed in any order (for example, 3 + 2 = 5 is the same as 2 + 3 = 5)." The following guidance to support teachers in providing explanatory feedback is provided: "Students use manipulatives to role-play mathematical problems. Using concrete objects allows students to use one-to-one correspondence to develop their

understanding of addition. By kinesthetically combining objects, students can start to visualize and internalize the process of composing 10 in various ways. As students are composing 10, listen to their mathematical thinking as they act out problems using formal mathematical vocabulary."

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—Compare—Difference Unknown (to 10)" activity, students use objects and pictorial models to compare sets within 10 to find the difference between the two numbers. The following prompt and guidance is provided: "It might benefit students to review the term compared with manipulatives such as cube towers and a situation that is relevant, such as 'If you are 5 years old and your sister is 3, how many years older are you? Let’s compare your ages.' Then have the student build the cube tower for 5 and the tower for 3 and place them side by side to compare."

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 Double Ten Frame to illustrate the addition of two single-digit numbers. Provide a single-digit addition fact. Ask students to place counters on each frame to represent the problem. Then have students combine the counters in order to determine the total without counting. This will assist students when using 10 as an anchor. Ask the students to identify when the counters make up ten and when they exceed ten."