Accelerate Learning Inc.

Spanish Mathematics, 2

STEMscopes Texas Math–Grade 2 Spanish

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Full-Subject, Tier-1	**9798893533712**	**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	223	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	1	0	0
2. Alignment with Public Education's Constitutional Goal	0	0	0
3. Parental Rights and Responsibilities	0	0	0
4. Prohibition on Forced Political Activity	0	0	0
5. Protecting Children's Innocence	0	0	0
6. Promoting Sexual Risk Avoidance	0	0	0
7. Compliance with the Children's Internet Protection Act (CIPA)	0	0	0

SUITABILITY EXCELLENCE FLAGS BY CATEGORY	IMRA REVIEWERS
Category 2: Alignment with Public Education's Constitutional Goal	1
Category 6: Promoting Sexual Risk Avoidance	0

IMRA Quality Report

1. Intentional Instructional Design

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

1.1 Course-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.1a	All criteria for guidance are met.	3/3
1.1b	All criteria for guidance are met.	2/2
1.1c	All criteria for guidance are met.	2/2
1.1d	All criteria for guidance are met.	2/2
1.1e	All criteria for guidance met.	2/2
—	**TOTAL**	11/11

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

The "Teacher Toolbox" includes a "Scope and Sequence" that outlines the specific order of math Texas Essential Knowledge and Skills (TEKS) and concepts taught throughout the school year. It begins with the "Launch into Grade 2 Scope," which explores the habits of a mathematician as students engage in a variety of skills: comparing numbers by matching greater than or less than, identifying and counting triangles, analyzing patterns, counting forwards and backwards by 2, 10, and 100, subtracting within 20 and using part-whole thinking, identifying coins by name and value.

The "Scope and Sequence" includes the scope or unit name along with the TEKS covered under each scope or unit. A total number of instructional days is suggested for each. For example, the "Numbers on a Number Line Scope" covers the TEKS 2.2E and 2.2F. The total instructional days for this scope is five days.

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 Fractions Scope includes four "Explore" activities: "Partition Objects," "Examples and Nonexamples," "Number of Parts vs. Size of Each Part," and "Count Parts Beyond One Whole."

1.1b – Materials include suggested pacing (pacing guide/calendar) to support effective implementation for various instructional calendars (e.g., varying numbers of instructional days – 165, 180, 210).

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

The "Implementation Guide" section 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 four focus areas in grade 2: "(1) understanding and applying place value concepts and properties of operations; (2) developing strategies to add and subtract whole numbers; (3) building a foundation for multiplication and division; and (4) analyzing relationships in numbers, fractions, geometry, and measurement."

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

In the "Add and Subtract Two-Digit Numbers Scope," students apply their knowledge of place value and number lines learned in the prior scopes: "Represent Numbers to 1200" and "Numbers on a Number Line." Students develop proficiency with strategies using two-digit numbers before extending this knowledge to three-digit numbers.

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

The "Represent Numbers to 1,200 Scope" includes a "Teacher Guide" with defined protocols for teaching the scope, student expectations, background content knowledge, academic vocabulary, and vertical alignment.

The "Represent Numbers to 1,200 Scope" also includes a "Suggested Scope Calendar," which provides a protocol that teachers can follow when conducting lesson internalization.

The "Represent Numbers to 1,200 Scope" also includes a "Content Support" which can be used for conducting unit internalization. It provides an overview of the scope, including background knowledge that students must have to be successful. Possible student misconceptions and obstacles are also provided, along with important terms to know.

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

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

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

The "Implementation Guide" includes "Foundational Teacher Actions" to support instructional leaders when observing and providing targeted feedback. "Foundational Teacher Actions" includes 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" can assist instructional leaders in ensuring high-quality implementation in every classroom.

1.2 Unit-Level Design

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

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

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

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

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

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

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

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

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

1.3 Lesson-Level Design

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

1.3a – Materials include comprehensive, structured, detailed lesson plans that include daily objectives, questions, tasks, materials, and instructional assessments required to meet the content and language standards of the lesson (aligned with the TEKS and the ELPS).

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

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

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

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

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

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

The student materials needed are also provided in the lesson overview. Examples of student materials include "Manipulatives" and "Student Journal Activities."

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

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

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

2. Progress Monitoring

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

2.1 Instructional Assessments

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.1a	All criteria for guidance met.	9/9
2.1b	All criteria for guidance met.	2/2
2.1c	All criteria for guidance met.	2/2
2.1d	All criteria for guidance met.	6/6
2.1e	All criteria for guidance met.	2/2
—	**TOTAL**	21/21

2.1a – Materials include a variety of instructional assessments at the unit and lesson level (including diagnostic, formative, and summative) that vary in types of tasks and questions.

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

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

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

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

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

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

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

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

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

The "Teacher Toolbox" provides a "Scope and Sequence," 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 each scope.

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

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

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

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

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

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

2.2 Data Analysis and Progress Monitoring

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

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

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

The "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. The "Heat Map" allows teachers and students to reflect on levels of understanding for each standard.

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

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

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

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

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

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

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

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

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

3. Supports for All Learners

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

3.1 Differentiation and Scaffolds

Guidance marked with a (T) refers to teacher-facing components. Guidance with an (S) refers to student-facing components.

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.1a	All criteria for guidance met.	3/3
3.1b	All criteria for guidance met.	2/2
3.1c	All criteria for guidance met.	2/2
—	**TOTAL**	7/7

3.1a – Materials include teacher guidance for differentiated instruction, activities, and paired (scaffolded) lessons for students who have not yet reached proficiency on grade-level content and skills.

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

STEMscopes Math Spanish provides an "Instructional Support" section 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 "Fractions Scope" includes the following guidance: "If students need additional support translating the physical model into a pictorial model, encourage them to put the pieces back together and draw their cuts. Alternatively, allow them to trace the physical model on a separate sheet of paper."

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 "Money Scope," an explanation of the following terms is provided to teachers: "Cent Symbol versus the Dollar Sign with Decimal Point," "Counting Collections of One Type of Coin," and "Counting Mixed Groups of Coins."

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 "Money Scope" includes picture vocabulary cards for the terms *penny*, *nickel*, *dime*, *quarter*, *value*, *cent*, *cent symbol*, *dollar*, *dollar sign*, *decimal point*, *money*, and *coin*. A student-friendly definition is included on each "Picture Vocabulary" card.

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

3.1c – Materials include teacher guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skill.

STEMscopes Math Spanish includes a *Scaffolded Instruction Guide* for every scope that provides activities for students who have demonstrated proficiency. The instructional activities are differentiated for students who are on grade level and for students who are above grade level. For example, the "Length Scope" includes "What's the Length" and "Baby Birds" as interactive activities 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 4" activity of the "Length Scope" provides the following guidance: "To extend this lesson, offer additional practice using tools to measure length. Students can measure objects on the playground, compare measurements made by other classmates, and discuss discrepancies. If there are large discrepancies, model the measurement with the whole class, and clarify inaccuracies or misconceptions."

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 "Length Scope," The "Math Today" activity has students explore the connection between length and the XLine Dubai Marina, which is the world’s longest zipline.

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 "Numbers on a Number Line Scope" provides guidance to teachers in modeling and explaining the concept to be learned. For example, the second bullet states, "Model a think-aloud strategy to discuss how to determine where numbers would fall on the open number line. Consider asking the following questions: What numbers could be placed between 0 and 500? What numbers could be placed between 500 and 1,000? What is halfway between 0 and 500? What is halfway between 500 and 1,000?"

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 "Numbers on a Number Line Scope" includes the following prompts and guidance: "Divide the class into groups of 3–4 students and distribute the sentence strips and sticky notes. Direct students' attention to the sentence strips and sticky notes. Allow students a few moments to discover the manipulatives and experience how they work with their groups. Instruct students to think about the scenario. They are traveling on a trip to the beach, and each number on the sticky notes represents how many miles away each rest stop is from the starting point. Ask students to place the sticky notes with the distances of the rest stops on their open number lines."

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 "Fractions Scope" includes an exploration of concepts and opportunities for student discourse as instructional approaches. "Divide the class into groups of 4 and give each group a set of construction paper, scissors, markers or crayons, and tape. Direct students' attention to the sheets of construction paper. Explain to students that the sheets of paper will represent fabric from the scenario. Allow students a few moments to discover the manipulatives and experience how they can be pieced together to create a quilt with their groups." 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 are met.	1/1
3.3c	All criteria for guidance are met.	8/8
3.3d	This guidance is not applicable to the program.	N/A
—	**TOTAL**	9/9

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

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

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

"Explore" activities include a "Language Support" section that provides implementation guidance to support teachers of bilingual/ESL programs. A list of the English Language Proficiency Standards (ELPS) is provided. The implementation guidance includes sentence stems and frames that the teacher can use during the lesson, such as, "I placed ___ close to ___ because" from the "Explore 1–Open Number Lines" activity. Ideas to effectively use visual aids are also provided in the "Language Support" section of every "Explore" activity, such as, "Provide students with illustrations or examples of words and phrases used in this 'Explore': *route*, *rest stop*, and *mile marker*. Model correct pronunciation of each phrase, and have students repeat as needed from the 'Explore 1–Open Number Lines' 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 "Fractions Scope" provides the following prompts to address the "Beginner Listening" domain: "Pick up one of the circle cutouts (hold up a circle). Fold the circle one time in the middle. Open the circle. Each

piece is one-half. Have students repeat the fraction." Teachers continue by asking students to "'get another circle. Let's partition the circle into 8 equal parts together. Watch and follow what I do. Show me with your fingers how many equal pieces the circle was split into.' Give students time to answer."

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–Open Number Lines" activity where they write and locate the positions of numbers on open number lines, they would be able to make connections to the following "Picture Vocabulary" cards: *place value*, *length*, *distance*, *position*, *gap*, *interval*, *number line*, and *open number line*.

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 "Fractions Scope," the teacher facilitates a class discussion around the scenario: "Jocelyn ordered a pepperoni pizza to share with her best friend. Each person will get half of the pizza. Fold the pepperoni pizza to show how much of the pizza Jocelyn and her friend will get." This supports comprehension, builds oral language, and prepares students for new academic vocabulary and content through culturally relevant connections. In the "Accessing Prior Knowledge" activity of the "Fractions Scope," students partition pizza cutouts into halves and fourths. They describe how many pieces make one whole pizza. Academic vocabulary used in this activity includes: *whole, half, fourth, eighth, fraction, fractional parts, equal parts, and partition.*

"Explain Tabs" includes a "Language Connection" section that guides teachers to support emergent bilingual students through written discourse. Guidance is provided to teachers based on the level of proficiency: beginning, intermediate, and advanced. For the beginner writing domain in the "Multiply and Divide Scope," the teacher engages students through the following prompts: "Echo-read the directions. Read and discuss the words in the word bank. Define and provide examples as needed. . . . 'Let's point to

and count the objects in the picture.' Choral-count each of the objects. Have students use the following sentence frames: 'There are ____ groups. There are ____ in each group. There are ____ total objects.' . . . 'We are going to create a multiplication story using the picture. 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. If necessary, invite students to use two-color counters to model the situation."

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

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

4. Depth and Coherence of Key Concepts

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

4.1 Depth of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.1a	All criteria for guidance met.	2/2
4.1b	All criteria for guidance met.	1/1
—	**TOTAL**	3/3

4.1a – Practice opportunities over the course of a lesson and/or unit (including instructional assessments) require students to demonstrate depth of understanding aligned to the TEKS.

The "Explore" activities, located in the "Compare and Order Numbers Scope," provide practice opportunities for students to develop and apply an understanding of place value concepts. Students generate numbers that are greater or less than 1200 using objects, pictorial models, and place value. Students compare these numbers using language and symbols.

The "Evaluate" assessments, located in the "Compare and Order Numbers Scope," provide practice opportunities for students to demonstrate they can generate numbers greater or less than 1200. Students demonstrate that they can also compare numbers using spoken and written language.

The "Explain" activities, located in the" Compare and Order Numbers Scope," also provide opportunities for students to generate numbers greater than or less than 1200, 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 Scope," provide practice opportunities for students to read, write, and represent numbers greater or less than 1200. 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 Scope," provide practice opportunities for students to demonstrate they can read, write, and represent numbers greater or less than 1200. The teacher provides prompts to students using a teacher prompt card and observes as they demonstrate their learning.

The "Explain" activities, located in the "Compare and Order Numbers Scope," provide practice generating numbers greater or less than 1200, 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 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's 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 past, current, 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. The "Teacher Guide" helps teachers explain why a strategy or representation is used and how it builds on earlier concepts.

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

4.3 Coherence and Variety of Practice

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.3a	All criteria for guidance met.	4/4
4.3b	All criteria for guidance met.	4/4
—	**TOTAL**	8/8

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

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

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

STEMscopes Math Spanish includes "Show What You Know" activities that provide spaced retrieval opportunities with previously learned skills and concepts.

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

STEMscopes Math Spanish provides "Small-Group Intervention" and "Partner Discussions" activities in which students apply previously learned skills and concepts.

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

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

5. Balance of Conceptual and Procedural Understanding

Materials are designed to balance conceptual understanding, procedural skills, and fluency.

5.1 Development of Conceptual Understanding

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.1a	All criteria for guidance met.	3/3
5.1b	All criteria for guidance met.	1/1
5.1c	All criteria for guidance met.	1/1
—	**TOTAL**	5/5

5.1a – Questions and tasks require students to interpret, analyze, and evaluate models and representations for mathematical concepts and situations.

The "Explore" activities found in every scope require students to engage with higher-order thinking skills. For example, under the "Procedure and Facilitation Points" for each of the "Explore" activities, the teacher prompts questions that require the students to interpret, analyze, and evaluate models. Students use their journals and/or manipulatives to complete the tasks. For example, the "Explore 1" activity in the "Add and Subtract Two-Digit Numbers Scope" includes the following tasks: "Ask students to complete the number sentence to determine the total number of vegetables in the basket and explain the strategy they used to solve it. Allow students to rotate through the different baskets until they have had a chance to explore all the different combinations of vegetables. After students have completed each basket and their Student Journals, bring the class together. 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 among the strategies used to add using place value."

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 Two-Digit Numbers Scope" includes the following Level 4 question: "Without using the linking cubes and Place Value Chart, how can you use place value to mentally add two-digit numbers?"

In the "Explore 5" activity of the "Add and Subtract Two-Digit Numbers Scope," students add up to four two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations. The first DOK-3 question in the "Math Chat" section prompts students to analyze how the problems are different from the problems encountered in the "Explore 1" activity. "How are these problems different from the problems we looked at in Explore 1?"

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

"Explore" activities require students to create a variety of models to represent mathematical situations. For example, in the "Representing Numbers to 1,200 Scope," students create their representations using both physical and virtual base-ten blocks and explain their reasoning. *STEMscopes Math Spanish* includes a "Foundation Builder" activity for every scope where students create models to represent mathematical situations. Students use manipulatives to model and solve problems presented during the teacher's slideshow. For example, in the "Fractions Scope," students engage in the following tasks: "Divide the class into pairs, and hand each student a sheet of construction paper. Instruct students to fold the paper into 2 equal shares. Discuss the following questions: What do equal pieces look like? How many times do you fold the paper to get 2 equal pieces? Did anyone fold the paper differently than you?"

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

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

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

In the "Math Stories" activity for each scope, students engage with narrative-based tasks that embed mathematical problems within realistic or imaginative storylines. These stories introduce new problem situations and contexts. Students extract relevant information, apply previously learned concepts, and justify their solutions through reasoning and modeling. For example, in the "Money Scope," students read a short story entitled "Change for Change." Students answer questions about money such as: "In paragraphs 2 and 3, the girl in the story showed her mom how much she knew about coins. Which of the following choices also equals one quarter?"

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 view a short video about a cashier and shopper before engaging in the following questions: "How does the cashier use the value of a collection of coins to help with their job? How does being able to count a collection of coins help the shopper? What would happen if the cashier or shopper did not know how to count the collection of coins? Is this a career you are interested in? Why or why not? How does a cashier use their knowledge of money to be creative in their job?"

5.2 Development of Fluency

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

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

The "Fluency Builder" activities in each scope fosters 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—Even or Odd" activity has students play a "Four in a Row" gameboard. "The dealer shuffles the deck of Playing Cards and deals them equally between the players. Each player may view all dealt cards at once. Each player chooses which side of the two-color counter they want to use to mark their spots. Players alternate turns. During each turn, a player chooses one card and shows it to the other player. The opponent solves the problem on the Student Recording Sheet, and the first player checks the answer by looking under the sticky note. Each time a player solves a problem correctly, the player places a counter in one game space. The player who successfully covers four connected spaces in a row (horizontally, vertically, or diagonally) wins."

"Spiraled Review" activities reinforce students' automaticity and fluency by providing consistent, cumulative practice with previously taught skills across several scopes. Students build fluency by repeated engagement with prior knowledge. In the "Spiraled Review—Zoo Field Trip" activity, students review previous or current grade-level content such as "Different Ways to Write a Number," "Measuring Length," "Comparing Numbers up to 120," and "Addition and Subtraction Problem Solving."

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 "Fractions Scope," students do an activity where they partition shapes into halves and fourths and use words to describe the shares and parts.

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—Even or Odd" activity has students play a "Four in a Row" gameboard. "The dealer shuffles the deck of Playing Cards and deals them equally between the players. Each player may view all dealt cards at once. Each player chooses which side of the two-color counter they want to use to mark their spots. Players alternate turns. During each turn, a player chooses one card and shows it to the other player. The opponent solves the problem on the Student Recording Sheet, and the first player checks the answer by looking under the sticky note. Each time a player solves a problem correctly, the player places a counter in one game space. The player who successfully covers four connected spaces in a row (horizontally, vertically, or diagonally) wins."

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

5.2c – Materials provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson and throughout a unit.

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

The "Decide and Defend" activities present students with a completed mathematical problem, sometimes correct and sometimes incorrect. Students are asked to determine whether the solution is accurate and

to justify their reasoning. For example, in the "Addition and Subtraction Problem Solving Scope," the "Decide and Defend" activity presents a word problem with a filled-in strip diagram. Students must evaluate whether the strip diagram is accurately representing the problem and provide reasoning behind their evaluation.

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 2—Represent and Solve One-Step Word Problems Pictorially" activity includes the following DOK-3 question: "Why do you think there were different representations that worked better for certain kinds of problems?" 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 "Multiply and Divide Scope," the "Accessing Prior Knowledge" activity provides the following facilitation tip: "Encourage students to keep the answer to themselves to allow all learners to solve independently."

The "Procedure and Facilitation Points" in each scope offers detailed, step-by-step frameworks that enable teachers to lead students toward increasingly efficient mathematical procedures. Through clear instructional sequences, reflective prompts, and modeling opportunities, teachers facilitate student awareness and adoption of more efficient problem-solving strategies. For example, in the "Explore 1—Model and Describe Multiplication" activity, the following embedded support is provided: "Direct students’ attention to the bag of two-color counters and Story Mat. Allow students a few moments to discover the manipulatives and experience how they work with their group. Instruct students to pull an Array Task Card out of the bag, read it together, and discuss what is happening in the problem. Ask students to use the counters and Story Mat to create a concrete model of each problem. Distribute the Student Journal to each student, and ask students to record a pictorial model of each problem in the designated box. Encourage students to write a number sentence and fill in the blanks to explain their model. Be sure to relate the model and the number sentence to the context of the problem."

The "Small-Group Instruction" provides the teacher with embedded support to guide students toward increasingly efficient approaches. The teacher receives specific steps to facilitate small-group instruction for students who did not demonstrate approaching-level understanding of the concept.. For example, in the "Multiply and Divide Scope," the following steps are provided: "Prior to beginning the activity, ask

students to tell you everything they know about separating a set of objects. As students answer, check to see if they understand the words equal groups, separate, and divide. Identify any misconceptions that students have. . . . Have students work in pairs. Give each pair of students 35 two-color counters and a dry-erase marker. Ask students to use the two-color counters and dry-erase marker to create a model of the following problem: Bailey has 35 stickers. Her sticker book has 5 pages. How many stickers can she put on each page?"

5.3 Balance of Conceptual Understanding and Procedural Fluency

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

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

The "Content Unwrapped" in each scope includes an "Implications for Instruction" section that focuses on the why and how behind mathematical procedures. The "Implications for Instruction" begins with conceptual implications related to why, which will lead into procedural implications connecting to the how. For example, in the "Three-Dimensional Solids Scope," the "Implications for Learning" section begins with students applying formal geometric language to the three-dimensional shapes they are familiar with, such as cylinders, cubes, cones, spheres, and prisms. This conceptual emphasis connects to procedural emphasis later when students use the formal geometric language to compare three-dimensional shapes with two-dimensional shapes.

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

5.3b – Questions and tasks include the use of concrete models and manipulatives, pictorial representations (figures/drawings), and abstract representations, as required by the TEKS.

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

The "Explore 1" activity in the "Represent Numbers to 1200 Scope" asks students to use concrete models and manipulatives to solve problems. The teacher asks questions as students use a set of small paper cups to count a set of seeds at a station: "How are you grouping the seeds from your cup?" and "Is there

another way to group the seeds to make counting more efficient?" The lesson progresses to the use of a pictorial model of the seeds broken into groups of hundreds, tens, and ones.

The "Explore 4" activity in the "Represent Numbers to 1200 Scope" has students learning more abstract representations. Students represent numbers up to 1200 using standard, word, and expanded forms.

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

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

In the "Explore" activities of "Addition and Subtraction Problem Solving Scope," students connect concrete objects to representational models and numeric concepts. Students represent and solve one-step word problems using concrete objects. The "Explore" activities progress as students represent and solve one-step word problems pictorially. Students use their student journals to make connections between the pictorial model and a number sentence representing the word problem. 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 "Add and Subtract Two-Digit Numbers Scope, there are five anchor chart activities, one for each of the five "Explore" activities. After the "Explore 1" activity, students create a chart showing addition with place value and a pictorial model to represent it. The teacher facilitates the discussion with the following questions: "How can we represent that number using tens and ones? How many ounces did Javier drink in the afternoon? How can we represent that number using tens and ones? How can we find the total number of ounces he has drunk today? What strategy did we use to figure out how many ounces he drank in all?"

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 2 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—Value of a Collection of Coins" activity has students determine the value of a collection of coins up to one dollar. Students count the coins in the bag to find the cost of each topping in a scenario provided by the teacher. After the activity, the teacher facilitates a "Math Chat" discussion using the following questions and prompts: "What was the total cost of each hamburger topping? What are the correct ways to write the value of coins? What is the difference between using a dollar sign and a cent symbol?" Academic vocabulary used in this lesson include: *value*, *cent*, *cent symbol*, *dollar*, *dollar sign*, and *decimal point*.

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: *penny*, *nickel*, *dime*, *quarter*, *value*, *cent*, *cent symbol*, *dollar*, *dollar sign*, *decimal point*, *money*, and *coin*. Each slide includes a visual and student-friendly definition to support language development.

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

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

connections. Students can add their pictures or drawings to their "Interactive Vocabulary Journals." Teachers can create math word walls in the classroom with the "Student Handout" materials that are provided.

The "Accessing Prior Knowledge" activities for each scope provide teacher guidance to scaffold and support the students' development and use of academic mathematical vocabulary. For example, in the "Fractions Scope," the teacher facilitates a discussion using the following questions: "What 2-D shape is the pizza? How many people are going to be sharing this pizza? How many pieces did you need to partition the pizza into? Are the pieces the same size? Did you fold your pizza the same way someone around you did? If not, what do you notice about your pieces?"

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—Partition Objects" activity, students partition sheets of paper into equal parts and identify the parts, including halves, fourths, and eighths. The teacher facilitates a discussion using the following questions: "How do we use fractions in everyday life? Is there more than one way a rectangle can be partitioned into 4 equal parts?"

5.4c – Materials include embedded teacher guidance to support the application of appropriate mathematical language to include vocabulary, syntax, and discourse to include guidance to support mathematical conversations that provide opportunities for students to hear, refine, and use math language with peers and develop their math language toolkit over time as well as guide teachers to support student responses using exemplar responses to questions and tasks.

The "Math Chat" section in each "Explore" activity supports students in developing and using appropriate mathematical language through structured discourse. Teachers are provided with sample questions and exemplary responses to model precise vocabulary and syntax. For example, in the "Explore 1—Cover Rectangles with Squares" activity, the following question and exemplar student response is provided: "Why is it important for the tiles to be lined up neatly, with no gaps or overlaps? Answers will vary. To find the area of the space, you need to line up all the tiles and not leave any spaces or have any tiles on top of each other. Otherwise, the measurement would be wrong. If they overlap, you will use too many tiles. If they have gaps, you will not use enough tiles."

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 "Area Scope," students discuss with a partner the following: "Talk to your partners about what it means to find the area of a rectangle. Use the following sentence stem: Area is ___. While pointing to each shape as you are talking about it, ask the following

questions: Which shape has the greatest area? Which shape has the least area? Talk with your partners while using the sentence frame on the Student Handout, and fill in the missing words."

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 "Area Scope," students are presented with the scenario: "Tiana bought a pizza that was cut into square pieces. She wanted to find the area of her pizza. Count and number the square slices shown, and answer the following questions." 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–Cover Rectangles with Squares" activity lists the content standard as 2.9F. The process standards included are 2.1A, 2.1B, 2.1C, and 2.1D.

In the "Explore 1–Count and Organize Collections within 1,000" activity, students count a collection within 1,000 by grouping objects into hundreds, tens, and ones. Students apply mathematics to problems arising in everyday life, society, and the workplace. For example, in the "Procedures and Facilitation Points," students count the seeds in the cups at their stations. Students must think about the most efficient way to count the seeds using the small paper cups provided.

The TEKS process standards are integrated appropriately into the materials, such as in the "Explore 2–Count Organized Collections within 1,000" activity. Students use pictorial models to count organized collections with 1,000. Students create and use representations to organize, record, and communicate mathematical ideas. For example, in the "Procedures and Facilitation" section, students record a pictorial model and the number of hundreds, tens, and ones for their number of seeds. They write how many groups of ten are in the total number of seeds. In addition, they draw a pictorial model of the same amount decomposed another way.

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–Generate Numbers Greater Than or Less Than" activity, the process standard "Use a problem-solving model that

incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution" is connected when students work through the following scenario: "The local electronics store is creating a new ad for the week. The owners want the original price of the item displayed, but they also want to show customers the discounted price and the price a local competitor is offering for the same item. The store needs our help finding those two prices so they can be added to the store ad. Can we help the electronics store identify those prices?"

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–Value of a Collection of Coins" activity, the 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 integrated as students work through the following questions: "What is the name of a restaurant that serves hamburgers where you live? What toppings do you love on your hamburger? What do you picture in your mind when you hear the words 'wall menu'? What do you already know about coins and counting to find the value of a collection of coins?"

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–Cover Rectangles with Squares" activity lists the content standard as 2.9F. The process standards included are 2.1A, 2.1B, 2.1C, and 2.1D.

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

The "Content Support" section in each scope or unit provides a description of how the Mathematical Process Standards are incorporated and connected throughout the scope. For example, in the "Money Scope," the process standard 2.1A is applied in the following way: "Students determine the value of a collection of coins in everyday life, society, and workplace situations, such as creating a menu for a restaurant."

The "Content Support" section of the "Multiply and Divide Scope" includes a description of how the Mathematical Process Standards are incorporated and connected throughout the scope. For example, the process standard 2.1B is applied in the following way: "Students use story mats, task cards, manipulatives, and a variety of other 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 Mathematical Process Standards are incorporated and connected throughout the scope. For example, the process standard 2.1C is applied in the following manner: "Students use a variety of tools, including manipulatives, pictures, task cards, journals, and virtual manipulatives, to solve problems and use estimation and number sense to read and write time to the nearest one-minute increment."

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—Cover Rectangles with Squares" activity lists the content standard as 2.9F. The process standards included are 2.1A, B, C, D.

In the "Explore 1—Count and Organize Collections within 1,000" activity, students count a collection within 1,000 by grouping objects into hundreds, tens, and ones. Students apply mathematics to problems arising in everyday life, society, and the workplace. For example, in the "Procedures and Facilitation Points," students count the seeds in the cups at their stations. Students must think about the most efficient way to count the seeds using the small paper cups provided.

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 "Length Scope," students must solve the following problem: "Your teacher is trying to decide what measurement tools to use to measure different objects around the classroom. The teacher wants you to try some of the classroom measuring tools and help choose the best one."

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 4–Count Parts beyond One Whole" activity, students count fractional parts beyond one whole using concrete models and real-world scenarios. This hands-on task supports mathematical thinking by having students use rods for halves, fourths, or eighths to model the fence sections needing to be painted. In this same activity, the teacher helps students make sense of mathematics through the following prompts: "Ask students to share their strategies, and encourage students to ask each other questions and make connections. Encourage students to notice the similarities and differences between the processes used to count parts beyond one whole."

The "Problem-Based Task" in each scope provides opportunities for students to think critically, apply strategies, and justify their solutions in real-world scenarios. These tasks encourage persistence through multi-step challenges and promote deep mathematical understanding by requiring students to model, reflect, and explain their reasoning. For example, in the scope "Multiply and Divide," the problem-based task has students work collaboratively to help the second-grade teachers arrange the 24 students into groups so they can play party games. The groups have to include all 24 students, and there must be an equal number of students in each group. 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 scope "Length," the "Math Story–Creating a Study!" presents students with a situation in which they design a room with furniture and decorations that will fit the dimensions of the room.

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

The "Math Chat" section of the "Explore" activities provides questions and prompts where students share their thinking, compare strategies, and explain why different approaches work. These structured discussions promote flexible problem-solving and help students understand that math is not one-size-fits-all, there are often several valid methods for reaching a solution. For example, in the "Math Chat" section of the "Explore 1–Count and Organize Collections within 1,000" activity, students share different pictorial representations of their seed counts. Students also explain and justify the most efficient way they found to count their seeds.

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–Value of a Collection of Coins" activity, students determine different strategies to add the total cost of the hamburger toppings such as the coin order to make skip counting more efficient. The teacher facilitates a whole-group discussion where different solutions are shared, and students explain their strategies.

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

6.1c – Materials are designed to require students to make sense of mathematics through multiple opportunities for students to do, write about, and discuss math with peers and teachers.

The "Accessing Prior Knowledge" activities include opportunities for students to make sense of mathematics as they do math with other students and the teacher. For example, in the "Represent Numbers to 1,200 Scope," students compose and decompose numbers up to 120 in more than one way using linking cubes and a "Place Value Chart." The following prompts are provided as students work in groups of three or four: "Facilitate a class discussion about how students built each number. This

provides an opportunity to gather an understanding of prior student knowledge before beginning the lessons. If all students built the number the same way, encourage them to try to build the same number in a different way. Have students explain and 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 "Fractions Scope," students label the fractional parts of different clay models provided by the teacher. Afterwards, they respond through writing to the prompt: "How do you use fractions in the real world?" 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 3–Represent and Solve Multi-Step Word Problems with Concrete Objects" activity, students represent and solve multi-step word problems involving addition and subtraction within 1000 using concrete objects. A discussion among the teacher and students is evident in the following prompts: "Monitor and talk with students as needed to check for understanding by using the following guiding questions: What information are you given in this word problem? What do you need to find? How many actions are occurring in this word problem? How can you solve this problem using base-ten blocks?"

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—Value of a Collection of Coins" activity, students determine different strategies to add the total cost of the hamburger toppings, such as the coin order, to make skip counting more efficient. The teacher facilitates a whole-group discussion where different solutions are shared, and students explain their strategies.

The "Problem-Based Task" in each scope provides teacher support in guiding students to reflect on their problem-solving approaches and promote deep mathematical understanding by requiring students to model, reflect, and explain their reasoning. For example, in the scope "Multiply and Divide," the problem-based task has students work collaboratively to help the second-grade teachers arrange the 24 students into groups so they can play party games. The groups have to include all 24 students, and there must be an equal number of students in each group. 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 4—Count Parts beyond One Whole" activity, the teacher facilitates a whole-group discussion with the following prompts and questions: "How did the Cuisenaire rods help you visualize the number of parts beyond one whole? What are some things you could share into equal fractional parts? Why is it important to know the whole first?"

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 "Compare and Order Numbers Scope," a misconception included states: "Students may get confused and reverse the symbols < >." The following guidance to support teachers in providing explanatory feedback is provided: "The symbol is connected to the number line. Notice that the greater-than and less-than signs show students

that numbers are getting larger or smaller." An illustration of a number line is provided with the <> symbols highlighted.

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 and Order Numbers" activity, students compare and order whole numbers up to 1,200 using place value and number lines. The following prompt and guidance is provided: "Students might need additional support with remembering which symbols represent greater than, less than, and equal to. The more exposure students have to these symbols, the more likely they will be able to remember the symbols' meanings. When students write each symbol, it is important to hear and say greater than or less than to help them internalize the meaning. Have students look at the shapes of the symbols to see that the greater numbers are next to the sides that are wide and the lesser numbers are next to the narrow sides. Consider printing these terms from the Picture Vocabulary element and posting them for reference throughout the Explore."

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—Open Number Line" activity, students use an open number line to illustrate a variety of number and operation concepts. The following prompts and guidance is provided in anticipation of misconceptions: "Display the number line provided on the Student Handout that is applicable to the concepts being taught. Model how to add hash marks and numbers to the number line as needed. You may also cut the Student Handout into strips so that students may write on their own number line."