Accelerate Learning Inc.

Supplemental Spanish Mathematics, K

STEMscopes Texas Math Pulse–Kindergarten Spanish

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Supplemental	**9798330804832**	**Digital**	**Static**

Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	127	13	Flags Addressed	Not Applicable	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	20 out of 20	100%
2. Progress Monitoring	20 out of 24	83%
3. Supports for All Learners	33 out of 35	94%
4. Depth and Coherence of Key Concepts	16 out of 16	100%
5. Balance of Conceptual and Procedural Understanding	38 out of 38	100%
6. Productive Struggle	19 out of 19	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	4	0	0
2. Alignment with Public Education's Constitutional Goal	0	0	0
3. Parental Rights and Responsibilities	0	0	0
4. Prohibition on Forced Political Activity	0	0	0
5. Protecting Children's Innocence	0	0	0
6. Promoting Sexual Risk Avoidance	0	0	0
7. Compliance with the Children's Internet Protection Act (CIPA)	1	0	0

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

IMRA Quality Report

1. Intentional Instructional Design

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

1.1 Course-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.1a	All criteria for guidance met.	4/4
1.1b	All criteria for guidance met.	3/3
1.1c	All criteria for guidance met.	2/2
1.1d	All criteria for guidance met.	2/2
1.1e	All criteria for guidance met.	2/2
—	**TOTAL**	13/13

1.1a – Materials include an alignment guide outlining the TEKS, ELPS, and concepts covered, with a rationale for learning paths across grade levels (vertical alignment) and within the same grade level (horizontal alignment) as designed in the materials.

The materials provide a "Rationale for Scope Order" across and within the grade level, showing vertical alignment for math concepts. The *Teacher Toolbox* outlines how concepts build in complexity across grade levels. This section also includes a clear scope that aligns with Texas Essential Knowledge and Skills (TEKS) and sequence of kindergarten that provides evidence of key concepts covered. The materials provide a rationale for learning, which includes three focus areas for instructional time for teachers. The Scopes tab provides the progression of learning and reinforces skills that demonstrate a horizontal alignment across the grade level. In kindergarten, the "Unit/Module Overview (Content Support)" provides current content with alignment to future grade levels, including current standards aligned to the instructional units, with background knowledge from previous grade levels, and the application process for mathematical standards.

1.1b – Materials include an implementation guide with usage recommendations and strategies for effective educator use in various contexts, such as just-in-time supports, advanced learning, or as a course.

The materials include D*ifferentiation* P*athways* with just-in-time support for personalizing instruction based on students' proficiency levels and recommended intervention strategies to support all types of learners in the Interventions tab found in the T*eacher* T*oolbox;* for example, "Adaptive Development."

The materials include an "Implementation Guide" for the educator's use. This guide serves as a resource for educators to support their understanding of the curriculum and how to navigate the various tools

included. The "Implementation Guide" further explains the functions of the 5E+IA model provided in each scope. These sections include learning supports for students' diverse needs and plans for interventions and extensions.

The *Differentiation Pathway* helps educators choose activities that best support students to reach their unique goals. These activities meet students where they are: approaching, meeting, or master's level in their content knowledge and skills. This guidance helps educators in adapting materials to student needs, and the information can be located in the *Teacher Toolbox* under "Lesson Planning Resources."

1.1c – Materials include a TEKS correlation guide with recommended skill entry points based on diagnostic assessment results.

The *Scaffolded Instruction Guide* allows the teacher to see four levels of performance sorted by percentile range. Teachers use this guide to search for suggested materials based on students' Instructional Area scores and needs and are organized by standards. Additionally, key concepts and fundamental questions are provided for further diagnostic assessment by teachers. The *Suggested Scope Calendar* provides an interactive platform, allowing educators to view diagnostic assessments for each standard and suggested activities based on the objective and standard. The materials provide a grade-level TEKS-aligned guide embedded in each grade-level content scope, that helps educators understand the focus area, connect standards, key concepts, and fundamental questions.

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

The materials include a *Suggested Scope Calendar*, describing daily learning objectives, and dividing learning into whole-group and small-group sessions to allow for differentiation. Assessment options provide a variety of activities to assess understanding. Content Support links remind teachers of the TEKS expectations. The materials include a "Content Support" section for teachers to preview the unit to understand key standards, unit objectives, and vocabulary. This section in the materials assists in unit and lesson internalization. The materials include a S*uggested Scope Calendar* that provides an overview of each content area. These materials provide a detailed description of steps needed to internalize lessons, such as reviewing standards addressed in a scope, recognizing which standards will be assessed, reviewing the Progression of Learning in the Scope Overview, and determining which resources will be used for practice and assessments.

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

The materials include a *Suggested Scope Calendar*, planning resources, pacing, practice, and assessment options. It also includes lesson models for instructional leaders to support educators with implementing materials. These resources allow instructional coaches to effectively implement instruction when needed.

The materials provide instructional coaches an outline of all the tools included in the *Teacher Toolbox* to assist with instruction, pacing recommendations, and program structure through the resources listed, such as Curriculum Design and Lesson Planning resources, Structured Conversations, Reference Documents, Student Goal Setting, and Process Standards and Interventions. The materials include a comprehensive list of instructional materials by grade level, as well as a grade-level-specific inventory of instructional resources required to support student learning.

1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	All criteria for guidance met.	5/5
1.2b	This guidance is not applicable to the program.	N/A
1.2c	All criteria for guidance met.	2/2
—	**TOTAL**	7/7

1.2a – If designed to be static, materials include detailed lesson plans with learning objectives, teacher and student materials, lesson components with suggested timeframes, and assessment resources aligned with the TEKS and ELPS.

The materials include Scope Calendar planning resource, pacing, practice, and assessment options, and lesson models for instructional leaders to support educators with implementing materials. These resources allow instructional coaches to effectively implement instruction when needed.

The materials provide instructional coaches an outline of all the tools included in the *Teacher Toolbox* to assist with instruction, pacing recommendations, and program structure through the resources listed, such as Curriculum Design and Lesson Planning resources, Structured Conversations, Reference Documents, Student Goal Setting, and Process Standards and Interventions.

The materials include a comprehensive list of instructional materials by grade level, as well as grade-level-specific inventory of instructional resources required to support student learning.

1.2b – If designed to be adaptive, materials include detailed lesson overviews with learning objectives, lesson components with suggested timeframes, and assessment resources aligned with the TEKS and ELPS.

This guidance is not applicable because the program is not designed to be adaptive.

1.2c – Materials contain support for families in Spanish and English for each unit, with suggestions on supporting the progress of their student(s).

The materials include strategies and activities, in English and Spanish, to send home that also include important vocabulary, explain what is being taught at school, and what can be taught at home to reinforce the content.

The materials include information for families, in English and Spanish, on what is required to master the skill being studied, including "While Working with Your Student at Home," followed by vocabulary use and activities. The Take-Home Letter fosters connections between home and school. For example, the letter includes a unit overview and activities connected to what the student is learning in that scope.

The materials include Spanish sentence stems to promote discussion. These may be used in the classroom and may also be introduced at home to assist student thought and to discuss math concepts with family.

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.	2/2
2.1b	All criteria for guidance met.	2/2
2.1c	Not all points were given because all criteria for guidance were not met. The only feature the teacher can enable or disable is the calculator when assigning assessments to students.	2/4
2.1d	All criteria for guidance met.	4/4
2.1e	All criteria for guidance met.	4/4
—	**TOTAL**	14/16

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

The materials include a baseline diagnostic assessment with instructions and the intended purpose for the given grade level and skill to gain a solid understanding of the student's background knowledge. These assessments allow the teacher to gather the data necessary to plan lessons, deliver instruction, and monitor student progress.

The materials include the S*uggested* S*cope* C*alendar*, which includes examples of quick checks, warm-ups, think-pair-share, and exit tickets.

The materials include an Observation Checklist, defined as an assessment that evaluates key concepts and skills within the scope. In contrast, the Skills Quiz is defined as a short, standards-based formative assessment designed to determine fluency with key concepts and skills within the scope. The Observation Checklist is a formative assessment for teachers and as a self-assessment for students while the Skills Quiz is a standards-based formative assessment to determine math fluency with key concepts and skills in the scope.

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

The materials provide guided small-group interventions with student checkups at the end to assess student knowledge of content. Small-group instruction allows teachers to informally assess students while providing consistent instruction to all students in the group. Following the small group, students are formally assessed to determine their understanding.

The materials include clear guidance for teachers to administer the assessments efficiently. The Skills Quiz includes tips and tricks that help the teacher administer the assessment accurately. The materials guide teachers with step-by-step instructions for administering each component of the assessment.

The materials include an assessment that allows teachers to evaluate either a whole group or a small group (due to the age of students). Each student receives the same paper assessment, and any student may receive manipulatives by request. In addition, the Skills Quiz guiding document helps teachers administer assessments including provisions for eligible students to request manipulatives and Supplemental Aids a.

2.1c – Digital assessments include printable versions and accommodations, including text-to-speech, content and language supports, and calculators, that educators can enable or disable to support individual students.

All criteria for guidance were not met. Digital assessments include accommodations such as text-to-speech, content and language supports, and calculators, but do not allow educators to enable and disable these supports for individual students.

The only feature the teacher can enable or disable is the calculator when assigning assessments to students.

The materials include digital assessments, such as Benchmark Assessments, that provide meaningful data that can be used to inform instruction in the classroom. The materials include printable versions of digital assessments.

The materials include a Skills Quiz that can provide a printable assessment to meet students' individual needs. A paper copy of the Skills Quiz Assessment may be obtained for each TEKS/Scope. The printed materials are also available in Spanish, for content and language support.

2.1d – Materials include diagnostic assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels.

The materials include Diagnostic Assessments to help access prior knowledge and demonstrate learning before engaging with the content. Benchmark Assessments include beginning, middle, and end-of-year, and Growth Measurement Assessments designed for pre- and post-assessment to track growth on grade-level standards are also included.

The materials include the *Editable Google File Skills Quiz* with various student activities, such as coloring cars with a given number of colors, counting and typing numbers in questions, and composing and decomposing numbers based on the number of different colors used to categorize objects.

The materials include a diagnostic assessment for each grade level before beginning the grade level scopes/content. The assessments gradually increase in complexity and are aligned to the TEKS for each grade level.

2.1e – Materials include a variety of formative assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels.

The materials include formative assessments for each grade level with varying levels of complexity. These assessments are used by teachers to gain data on student understanding and to inform instruction.

The materials include the *Suggested Scope Calendar*, and varying assessments that are aligned with the TEKS to provide a baseline for teachers to guide instruction and determine background knowledge of content areas.

The materials include interactive tasks aligned with the TEKS, such as typing the answer, selecting the answer, and filling in the blank for the answer.

2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	Materials do not include a rationale for correct and incorrect student responses, nor detailed reports to help teachers.	1/3
2.2b	All criteria for guidance met.	1/1
2.2c	All criteria for guidance met.	2/2
2.2d	All criteria for guidance met.	2/2
2.2e	This guidance is not applicable to the program.	N/A
—	**TOTAL**	6/8

2.2a – Instructional assessments include scoring information and guidance for interpreting student performance, including rationale for each correct and incorrect response.

The materials provide raw scores but do not offer detailed reports, such as item analysis, performance trends, or achievement comparisons, that help teachers make informed instructional decisions. Also, the materials do not include a rationale for correct and incorrect student responses.

The materials include assessments that provide a view of student progress over time. The Benchmark Assessments are given three times and serve as a way to gain information on student progress from the pre-assessment, mid-assessment, and post-assessment using the Heat Map, which allows teachers to gather data on student understanding of the content.

The materials include the Observation Checklists that provide a breakdown of key concepts and skills when used as a formative assessment for teachers to assess student performance on the TEKS. Teachers are able to indicate the skill observed, take notes about the observation, and provide feedback to the student. The materials guide teachers to interpret student performance with a scoring rubric, which has clear guidelines based on four percentile ranges for each standard. For example, elaborate activities, such as the Interactive Donut Shop, allow students to assess their knowledge of numbers by creating a model of the number identified. The system provides students with feedback, such as "2 is correct because the created picture of 2 donuts is 'equal to 2,'" or the created picture is incorrect because "4 is less than 5."

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

The materials include an Intervention to guide and support students having difficulty understanding the concepts or the TEKS taught by reviewing and reteaching the skill or the TEKS with multiple tasks and activities. The materials provide teachers based on student's needs, and are organized by standard and student performance percentile range.

The materials include the *Scaffolded Instruction Guide* that provides guidance on addressing specific skills with the suggested materials based on results from assessments. For example, the suggested plan includes direct links to materials and activities to use for each standard. The suggested plan in the *Scaffolded Instruction Guide* includes responsive instructional tasks and activities that help address specific learning gaps and provide targeted instruction.

The materials include a S*uggested* S*cope* C*alendar*, which provides assessments based on content areas that allow teachers address specific learning gaps with targeted instruction. For example, for each standard assessed, the plan includes direct links to activities such as small-group intervention activities and interactive games.

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

The materials include an Observation Checklist, a tool for teachers to track student progress on the TEKS by taking anecdotal notes on observed student performance of concepts and skills. Additionally, the Observation Checklist provides a self-assessment tool for students to track their progress and growth on the TEKS with anecdotal performance notes on concepts and skills.

The materials include a student-friendly data tracker for student goal setting and achieving goal mastery. The materials include an Observation Checklist for teachers to track student progress.

The materials include a Student Progress Teacher Tracker for addition and subtraction fact fluency, which can be customized to address content areas for all grade levels. The tracker equips teachers with tools to monitor student progress and growth. Additionally, the materials include a goal-setting and progress tracker for students to track their progress. The student-friendly trackers allow students to visualize their growth and record their scores from different content area activities.

2.2d – If designed to be static, materials provide prompts and guidance to support educators in conducting frequent checks for understanding at key points throughout each lesson or activity.

The materials include "Explore" activities like Math Chats, which includes prompts for teachers to use to conduct frequent checks on students' understanding of the skills being taught. The Math Chats include structured conversation questions for the students; for example, "What did you notice about the combinations you created?" and "What are all the combinations for composing the number 10?"

The materials include talking points to guide questions and prompts to check for understanding during the lesson and activities. For example, one of the questions is "What do the shapes in this group have in common?" An Observation Checklist is included for teachers to use during and after the lesson or assessment. Teachers can track student behaviors that indicate understanding and the learning pathway for each skill mastered.

The materials include several opportunities for teachers to check for understanding during a lesson. Procedure and facilitation points are available for teachers throughout the content area scopes to guide students during instruction and to address misconceptions.

2.2e – If designed to be adaptive, materials provide frequent checks for understanding at key points throughout each lesson or activity.

This guidance is not applicable because the program is not designed to be adaptive.

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	SCORE SUMMARY	RAW SCORE
3.1a	All criteria for guidance met.	1/1
3.1b	All criteria for guidance met.	4/4
3.1c	All criteria for guidance met.	2/2
3.1d	Materials do not include educator-controlled options to enable or disable text-to-speech or content and language support for individual students. These features are available to all students by default and cannot be personalized based on student need.	1/3
3.1e	All criteria for guidance met.	2/2
—	**TOTAL**	10/12

3.1a – Materials include explicit educator guidance for lessons or activities scaffolded for students who have not yet reached proficiency in prerequisite or grade-level concepts and skills.

The materials provide a *Scaffolded Instruction Guide*, which includes explicit educator guidance on different scaffolded lessons or activities for students who have not yet reached proficiency in a given content area. The guide is broken down into four percentile ranges for each standard and includes instructional support for every level. For example, if a student performs at 25%–50% on assessments, then the teacher is given explicit guidance on a small-group intervention lesson. For instance, the *Scaffolded Instruction Guide* allows teachers to reteach students who scored in the previous grade-level remediation by having them use a number path and manipulatives to have students place one object at a time on a number path while counting forwards and backwards within 20.

The materials include an Observation Checklist for teachers to observe and assess student performance, take anecdotal notes, and use reflection questions. The checklist also provides notes to colleagues offering instructional support and for documentation in standards-based reporting.

The materials include small-group intervention activities for students who are performing below 50% on scope assessments. The description states that the small-group intervention is a "reteach activity that supports student understanding of the concept by reteaching the current skill."

3.1b – Materials include explicit educator guidance for language supports, including pre-teaching and embedded supports for developing academic vocabulary and unfamiliar references in text.

The materials include a "Language Supports" section in each "Explore" lesson for every grade level and content area. These language supports include sentence stems, modeling think-aloud strategies, supporting students modeling concepts and vocabulary with their hands, having real-world objects labeled and ready to use for acting out, and supporting students with expanding and internalizing vocabulary. The "Explore 1" activity includes a section for language supports that includes structured opportunities for students to talk with partners using academic language and vocabulary. For example, "Provide sentence structures for students to use during their group work: I counted___ objects. I have the number___ How many___ do you have?"

The materials include a "Content Support" page, which provides an overview of the grade-level content. This page includes Terms to Know, which are vocabulary words with definitions to be taught throughout the scopes to ensure that students understand the concepts and can access the material with no misconceptions or misunderstandings. "Cognitive Development" provides teachers with guidance on how to give language support. For example, teachers use Vocabulary Words, Conversational Vocabulary, Underlining Unfamiliar Words, Associated Words, and Word of the Day.

The materials include picture vocabulary in the "Explain" section, offering embedded language supports that help pre-teach academic vocabulary. These visuals are paired with clear educator guidance to support students' understanding of key terms and unfamiliar concepts. This visual can be used as a teaching tool when working with activities, such as "Explore" activities. The vocabulary section includes pictures and flashcards to use in each scope.

3.1c – Materials include explicit educator guidance for enrichment and extension activities for students who have demonstrated proficiency in grade-level and above grade-level content and skills.

The materials include the *Scaffolded Instruction Guide*, which includes educator guidance for scaffolded lessons based on the students' performance on scope assessments. The Interactive activities support students at grade level and allow students to practice the concepts learned and to demonstrate their understanding. For example, the materials include enrichment activities such as "A Cool, Cool Trip" that includes real-world applications and cross-curricular content. For example, in this activity, students are asked to count popsicles for lemurs at a zoo in Rome. The *Scaffolded Instruction Guide* helps teachers select lessons and activities to support student learning at each proficiency level.

The materials include the "Coming Attractions" for those students who have shown proficiency and are ready to extend their understanding to a higher level. Skills to be learned in the next year (grade 1) are described, and activities suggested. For example, using objects and pictorial models to solve word

problems involving joining, separating, and comparing sets within 20, composing 10 with two or more addends with and without concrete objects, and explaining strategies used to solve addition and subtraction problems up to 20. For instance, in kindergarten, students may receive accelerated instruction under the "Acceleration" column by applying math and other cross-curricular content through authentic, real-world media. For example, students view a video and explain how a Japanese artist created an art exhibit using a bubble machine. Students discuss the video and complete a handout, independently or with a partner, to answer questions related to the real-world activity viewed in the video lesson.

The materials include extension activities for a deeper understanding of a given concept and an understanding beyond the teaching. These activities also allow educators to gather data to support student learning needs. For example, the Fluency Builder activity in each grade-level scope allows students to continue to build on the knowledge they have already gained in a given concept area.

3.1d – Digital materials include accommodations, including text-to-speech, content and language supports, and calculators that educators can enable or disable to support individual students.

The digital materials include text-to-speech, content and language supports, and a calculator that the educators can enable and disable for each student. However, the calculator is the only accommodation the teacher can individually assign in the Assign Activities settings. For example, with Skills Quiz, teachers can assign assignments with calculator use by clicking and turning on/off the "4 Function Calculator."

The materials provide a feature where teachers may assign "Explain" activities with the ability for students to use calculators, by the teacher turning on/off this feature. For example, the Show What You Know activity in each grade-level scope has a function that teachers can turn on to allow for a four-function calculator in the "Assign to Students" page.

The materials, by default, give students access to enlarged text, a text-to-speech feature, text highlighting, commenting tools, and dictionary mode for assistance.

3.1e – Materials include educator guidance on offering options and supports for students to demonstrate understanding of mathematical concepts in various ways, such as perform, express, and represent.

The materials include Procedure and Facilitation Points question stems for teachers to assist students in articulating their understanding of representing numbers to at least 20. Additionally, Math Chats can be conducted after the activities to allow students to share their observations and learning based on their construction of concrete models.

The materials include opportunities for students to demonstrate understanding with virtual manipulatives. The Explore activities include an instructional support section with suggested supports to

help students demonstrate understanding in various ways. The instructional supports include "If students need additional support completing their Student Journals, encourage them to create a simple picture to represent the number of items they counted."

The materials include an Observation Checklist that offers students a variety of ways to express their thinking and to keep track of mathematical concepts to show their understanding of the content. The materials include a "Content Support Page" that enables teachers to provide a range of strategies and supports for students to utilize in demonstrating their understanding of mathematical concepts in various ways. For example, the Skills Quiz allows students to demonstrate understanding by performing tasks like visual identification.

3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	All criteria for guidance met.	5/5
3.2b	All criteria for guidance met.	2/2
3.2c	All criteria for guidance met.	3/3
3.2d	All criteria for guidance met.	2/2
3.2e	All criteria for guidance met.	2/2
—	**TOTAL**	14/14

3.2a – Materials include explicit (direct) prompts and guidance for educators to build knowledge by activating prior knowledge, anchoring big ideas, and highlighting and connecting key patterns, features, and relationships through multiple means of representation.

The materials include "Procedure and Facilitation Points," which serve as guidance for educators to build background knowledge for students by anchoring big ideas. For example, students compare numbers to 10 concepts as part of the Facilitation Points guides. Teachers activate prior knowledge by asking students questions: "Did you count things in preschool or pre-K? Why do you think it is important to count items correctly? What can you draw to represent your objects? What numeral did you write to represent how much you counted?"

The materials include the "Math Chats," which serve as teacher-guided discussions to engage students. Key patterns, features, and relationships are highlighted and connected through multiple means of representation. For example, students make connections to key relationships of coins by playing Reverse Coin Bingo. Students become more familiar with coins as the teacher holds up a coin for students to identify. They then look at their Bingo card to see if they have the reverse side of the coin that was shown or called out by the teacher.

The materials include direct prompts for educators to build knowledge by activating prior knowledge. For example, the "Explore 1" activity states to help students access the task by asking the following questions: "What do you know about shapes? Have you donated clothes or toys before? How did you sort your shapes? What do the shapes in this group have in common? And is there another way you can sort your shapes?"

3.2b – If designed to be static, materials include educator guidance for effective lesson delivery and facilitation using various instructional approaches.

The materials include a *Suggested Scope Calendar*, which guides educators to effectively teach and facilitate concepts using a variety of instructional approaches. These approaches include, but are not limited to, small-group activities, independent practice, whole-group discussions through math chats, and

hands-on exploration using manipulatives. The materials include opportunities for students to work in pairs while exploring with manipulatives.

The materials include a "Pacing Guide" for teachers with differentiation based on math instructional blocks. Suggested timing options include 45-, 60-, 90-, and 120-minute blocks. Included in these blocks are suggested activities for Warm-Ups, Math Instruction, and Closure. For example, numeracy, fluency, interactive notebooks, Hook and Explore activities, Small-Group Intervention/Skill Review and Practice, Exit Tickets, Show What You Know, Skills Quiz, and Anchor Chart as options available for the teacher to use.

The materials include the "Whole-Group Planning Guide," a breakdown of whole-group activities, assessment and closure activities, small-group suggested instruction, and station activities. Some of these activities include the suggested amount of time of instruction, and if the teacher finds time is limited, the essential elements that cover the TEKS are highlighted. These activities are further detailed by each day of instruction, for example, Day 1, Day 2, etc.

3.2c – Materials include multi-tiered intervention methods for various types of practice and structures and educator guidance to support effective implementation.

The materials include a *Scaffolded Instruction Guide*, which allows teachers to meet the individual student needs based on their scope assessment performances. This guidance allows teachers to effectively support students in the implementation of multi-tiered intervention methods.

The materials include multi-tiered intervention methods through small-group intervention. For example, one intervention suggested helps students count up to ten objects in structured and scattered arrangements. Students work in collaboration with peers using dry-erase boards, markers, counting mats, and linking cubes to learn to count to 10. This intervention can be extended to counting forward and backward within 20 as students progress through the intervention.

The materials include guidance for teachers to support implementing multi-tiered interventions with intervention description, materials needed, and "Procedures and Facilitation Points" divided into parts: "Compose and Decompose 6," through "Compose and Decompose 10." Each part is accompanied by guiding questions and procedures for the teacher to use. For example, various instructional structures, such as students collaborating with peers to solve problems and working in a group to discuss and experience the mathematical concepts.

3.2d – Materials include enrichment and extension methods that support various forms of engagement, and guidance to support educators in effective implementation.

The materials include the *Scaffold Instruction Guide*, which includes educator guidance for scaffolded lessons based on the students' scope assessment performances. When a student performs at-grade-level or above-grade-level on assessments, the teacher is given explicit guidance on enrichment and extension

activities. For example, enrichment activities, such as "A Cool, Cool Trip," include real-world applications and cross-curricular content. In this activity, students are asked to count popsicles for lemurs at a zoo in Rome.

The materials include an extension activity that allows students to extend their knowledge of the concept while also reviewing previous knowledge on the content. This differentiated activity meets the needs of diverse learners and allows for further comprehension and access to the scope, including a description of the activity, procedures, and facilitation points, discussion questions, media, media/subject-related questions, and virtual student activities.

The materials include enrichment and extension opportunities for students. Students make and apply math connections and other cross-curricular content by viewing a video. For example, after watching a video about a unique museum in Washington, D.C., students reflect on what they saw and learned from the video. Students are asked, "Where do you see math might be used in this video?" Students use an online activity to show the addition of Lego blocks they saw in the video. Their understanding is extended by having them type in a number sentence showing how the Lego blocks were put together. At the end of the activity, students draw a picture of the math problem using virtual graphing tools.

3.2e – Materials include prompts and guidance to support educators in providing timely feedback during lesson delivery.

The materials include an Observation Checklist, which is used as both a formative assessment for teachers and a self-assessment for students. The "Explore and Explain" activities in each grade-level scope provide ways to monitor student progress and take notes on which skills were observed during the lesson. The teacher can also provide timely feedback to ensure the student has a clear understanding of the concept.

The materials include guidance for teachers to monitor and talk with students as needed to check for understanding by using guiding questions. For example, the "Math Chat" guides teachers with different Depth of Knowledge (DOK) prompts to provide timely feedback toward the end of the lesson. Questions include "How is your pictorial model connected to the linking cubes you used to act out each problem? What strategy helped you the most? Why?"

The materials include prompts and guidance to support educators in providing timely feedback during lesson delivery, including guidance for teachers to monitor and talk with students as needed to check for understanding by using guiding questions and the prompts to help the students provide timely feedback during lesson delivery.

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	This guidance is not applicable to the program.	N/A
3.3c	All criteria for guidance met.	1/1
3.3d	All criteria for guidance met.	8/8
3.3e	This guidance is not applicable to the program.	N/A
—	**TOTAL**	9/9

3.3a – If designed to be static, materials include educator guidance on providing and incorporating linguistic accommodations for all 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 adaptive Spanish program does not require guidance on providing and incorporating linguistic accommodations.

3.3b – If designed to be adaptive, materials include embedded linguistic accommodations for all 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 adaptive Spanish program does not require guidance on providing and incorporating linguistic accommodations.

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

The materials include the "Teacher Toolbox" tab, which includes a section labeled "Multilingual Learners." The information provided here (Linguistic Diversity) allows teachers to use embedded resources to support linguistically diverse learners using research-based tools and strategies for various proficiency levels. For example, a section in the teacher guidance of each "Explore" section titled, "Language Supports," allows teachers to use different strategies to adapt the materials to meet students' linguistic and academic needs while ensuring alignment with state standards.

The materials provide implementation guidance on how to effectively use materials in state-approved bilingual/English as a Second Language (ESL) programs. The bottom portion of the guidance page, titled "Soportes de idiomas," guides teachers to support students by addressing and clarifying non-math vocabulary used. For example, students use the teacher-created anchor chart with descriptive words in both English and Spanish to complete and label their student journal, using connections between the languages.

The materials include guidance to support emergent bilingual students in increasing comprehension through oral discourse. Teacher guidance includes facilitating structured conversations where pairs of students use sentence structures to ask and answer questions. For example, in the "Explore 2" activity in the Two-Dimensional Scope, students can increase their comprehension by taking turns using the following sentence structures: "Partner A: What shape is it? Partner B: It looks like a___ It has ___ sides and ___ vertices."

3.3d – Materials include embedded guidance 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 materials include a resource for students to utilize and to take ownership of their language development and growing vocabulary, which allows them to make connections to prior knowledge. For example, students work with their partner to identify cognates and similarities between English vocabulary and the vocabulary in their home language, by using the cognates of the shapes. Students identify the names of the shapes, such as: *circle*/*círculo*, *triangle*/*triángulo*, and *rectangle*/*rectángulo*. In this activity, students can practice the shape names by making cross-linguistic connections.

Materials include embedded guidance to support emergent bilingual students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through written discourse. For example, students use the teacher-created anchor charts with descriptive words in both English and translated into Spanish, to complete and label their student journal by using connections between the languages. Additionally, teachers are guided to provide sentence stems to students so that they may develop academic vocabulary discourse through writing. Teachers provide sentence stems to students such as, "I counted ___objects," "I have the number___."

The materials include guidance to support emergent bilingual students in increasing comprehension through oral discourse. Teacher guidance includes facilitating structured conversations where pairs of students use sentence structures to ask and answer questions. For example, in the "Explore 2" activity in the Two-Dimensional Scope, students can increase their comprehension by taking turns using the following sentence structures: "Partner A: What shape is it? Partner B: It looks like a ___ It has ___ sides and ___ vertices."

3.3e – 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.	4/4
—	**TOTAL**	6/6

4.1a – Practice opportunities throughout learning pathways (including instructional assessments) require students to demonstrate depth of understanding aligned to the TEKS.

The materials include multiple activities for students to demonstrate depth of understanding, including Warm-Up activities, Structured Conversations, Explore activities, Show What You Know exercises, and Skills Quizzes for students to demonstrate depth of understanding to the TEKS and scope.

The materials include the S*uggested* S*cope* C*alendar* that offers teachers a variety of opportunities to practice the content. The S*cope* C*alendar* includes different pathways and activities for students that are aligned with the TEKS.

The materials include various instructional assessments throughout the grade-level scopes, which enable students to show what they know, while also allowing teachers to gather data to help guide and better inform instruction to meet the needs of students.

4.1b – Questions and tasks, including enrichment and extension materials, increase in rigor and complexity, leading to grade-level and above grade-level proficiency in the mathematics TEKS.

The materials include the scope to prepare students for grade-level proficiency and above-grade-level proficiency in mathematics according to the course rationale for each grade level. In kindergarten, the materials provide enrichment and extension activities that increase in rigor and complexity. For example, an enrichment activity titled "A Cool, Cool Treat" allows the student to go above and beyond in their learning and make cross-curricular connections.

The materials include a Spiraled Review activity that allows students to review previous material and reinforce key concepts to assist in understanding grade-level content. These activities also serve as information for teachers to gather data to help guide instruction. The materials provide enrichment extension activities which increase in rigor of content and allow for learning opportunities for students above-grade level.

The materials provide students with opportunities to practice what they have learned through an on-level interactive extension activity. The acceleration section in "Math Today," titled "A Cool, Cool Treat," allows students to explore connections and applications of math through real-world connections. In kindergarten, the section "Show What You Know" in the "Explain" section has students demonstrate their learning based on the "Explore" section of the lesson.

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.	1/1
4.2c	All criteria for guidance met.	4/4
—	**TOTAL**	6/6

4.2a – Materials demonstrate coherence across concepts horizontally within the grade level by connecting patterns, big ideas, and relationships.

The materials include the Course Rationale that states: "Each scope in Grade K STEM scopes Math is carefully crafted to build on previous knowledge, ensuring a seamless transition between concepts as well as fostering a deep, comprehensive understanding of mathematics. Each scope builds on the last, ensuring students develop a robust and interconnected understanding of mathematics from the start. The journey through the STEM scopes of Math reflects a deliberate progression from foundational numeracy and geometric concepts to more complex mathematical thinking and real-world applications."

The materials include a background knowledge overview in the "Content Support" tab that explains what students learned in their previous grade. For example, in pre-k and through at-home experiences, students learn that objects can be counted. They have prior knowledge of rote counting to at least ten, and they use their fingers to count.

The materials provide coherence across grade levels that allow students to see mathematics as an interconnected web of ideas. The materials include guidance for teachers to reinforce concepts. For example, materials introduce the concept of counting objects to 10. This leads to students using counting mats to help count objects and organize them (such as in groups of five or 10). The concept is then connected to show a pattern by increasing the skill with counting forward and backward within 10 and even further with counting forward and backward within 20.

4.2b – Materials demonstrate coherence vertically across concepts and grade bands, including connections from grade K–6, by connecting patterns, big ideas, and relationships.

The materials include a vertical alignment chart that demonstrates the progression of what students learn in one grade level to prepare them for the next grade level. The well-structured mathematical progression allows students to build on prior knowledge while introducing new, developmentally appropriate skills.

The materials include a content support tab for each scope. The content support page includes a "Coming Attractions" section that helps teachers look ahead at what is to come. An overview section that

connects the patterns, big ideas, and relationships of each grade level. For example, the kindergarten section states, "In first grade, students use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and with unknowns as any of the terms in the problem."

Additionally, students extend counting and cardinality skills by generating sets of objects and creating patterns in the teen numbers. They also read, write, and represent numbers to at least 20, and extend number knowledge by understanding the concepts of one more and one less.

4.2c – Materials demonstrate coherence across lessons or activities by connecting students' prior knowledge of concepts and procedures to the mathematical concepts to be learned in the current grade level and future grade levels.

The materials include procedures to teach the mathematical concepts in the "Pre-Explore" and "Post-Explore" sections which ask questions of different DOK levels, such as "How did you model this in your picture?" and "How would the scenario change if the wave ended up bringing two more crabs to hand out on the rocks?" Procedures are provided with more advanced math vocabulary and questions such as "How many total people were invited to the party?" and "What number sentence did you write to represent this problem?"

The materials include a background knowledge overview in the "Content Support" tab explaining what students learned in their previous grade. For example, in pre-kindergarten and through at-home experiences, students learn that objects can be counted. They have prior knowledge of rote counting to at least 10, and they use their fingers to count.

The materials include a "Fact Fluency" section before the first content scope to be taught in each grade level. The "Fact Fluency" section allows students to build on prior knowledge and increase their understanding of the concepts of addition and subtraction. Students will follow a progression that will build their "Fact Fluency" knowledge through fluency, automaticity, and memorization. For example, students stay within 100 to count by 10s. They can also count forward by ones to 100 and backward from 20 by ones, and students learn to count objects placed in varying formations. The teaching of counting up to 100 will ease and enhance students' learning to count past 100 in grade 1. In addition, students in grade 1 learn to draw, join, separate, or compare sets of 10 to solve word problems.

4.3 Coherence and Variety of Practice

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.3a	All criteria for guidance met.	2/2
4.3b	All criteria for guidance met.	2/2
—	**TOTAL**	4/4

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

The materials include the Observation Checklist that provides a breakdown of key concepts and skills being taught in each scope. These checklists may be used to reflect forward and backward on what skills and concepts have been taught; retrieving information noted by the checklists allows for re-teaching of skills and concepts not yet mastered.

The materials include an interactive practice where students practice counting up to ten using pictures. Students previously learned one-to-one correspondence from one to –10 with real objects.

In kindergarten, the materials include a Spiraled Review where students review previous or current grade-level content based on the critical areas of focus set for each grade.

The materials offer a Spiraled Review for each grade-level content scope. This review allows students to access prior knowledge from previously learned material and connect to current concepts by demonstrating an understanding of the content. For example, students are able to use virtual manipulatives, linking cubes to create models of numbers, such as using five linking cubes to represent the number five. Later in the pathway, students are able to use a virtual Interactive Practice activity that allows students to virtually trace the numbers that are pronounced.

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

The materials include a Spiraled Review where students review previous or current grade-level content based on the critical areas of focus set for each grade. Students begin counting fluency by counting forward from one to ten and counting backward from 20 to one. As students continue through their pathway, students learn to associate counting numbers with counting objects to match the number and answer questions such as, "How many steps are on the ladder?" or "How many swing sets are there?"

The materials include an interactive practice where students practice counting up to 10 using pictures. Students previously learned one-to-one correspondence from one to 10– with real objects.

The materials gradually increase in complexity throughout the grade-level scopes.

The materials include an "Explore" section of each concept, and students demonstrate their understanding by building on previous knowledge acquired in the content area. This enhances students' problem-solving abilities and promotes flexibility in student thinking, allowing different strategies and tools. For example, students count objects by beginning from one to 10 and then use those skills to extend the counting to 20.

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.	2/2
5.1c	All criteria for guidance met.	1/1
—	**TOTAL**	6/6

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

The materials include questions and tasks, opportunities for students to interpret, analyze, and evaluate real-world situations; for example, students draw objects up to ten. The teacher asks, "What can you draw to represent your objects? Does your drawing match the number of objects in the bag? What would happen to the number of items if you put them back in the bag, moved them to a different place, and laid them out in a different arrangement?"

In another example, students are asked to view a video and then solve problems using objects and drawings to find differences within ten. The teacher asks, "What information do we know? What information do we need to find out? How many crabs did you draw at first? What happened when the wave crashed onto the rock? How did you model this in your picture? What number sentence describes your scenario (6 - 2 = 4)?"

The materials include the "Hook" section where students analyze a phenomenon and answer a variety of teacher-facilitated questions to demonstrate their understanding and to interpret the concepts. For example, students draw pictorial models using ten frames to find the total number of cupcakes. The teacher asks, "How can the Cupcake Ten Frames help us organize the order?" and "What other strategies can you share with the class that helped you in generating sets of objects?"

5.1b – Questions and tasks provide opportunities for students to create concrete models and pictorial representations to represent mathematical situations.

The materials include an "Explore" section for students to use manipulatives to demonstrate understanding of the concepts and to show their work using concrete materials in a variety of mathematical situations. Students can explore and present their solutions using virtual manipulatives like creating a pictorial representation by cutting out pictures of puppies. Students answer the question, "Pete's Pet Store had 6 puppies. Pete sold 2 puppies. How many puppies does Pete have left?" Students answer by cutting out and modeling their answer on the Join and Separate sheet.

The materials include an Observation Checklist with opportunities to use pictorial representations of mathematical situations to demonstrate student understanding of the materials and concepts. For example, students draw a picture and write the numeral that represents how many objects were counted by completing the sentence structure.

The materials included in the "Show What You Know" section within the "Explain" phase include tasks that prompt students to create concrete models or draw pictorial representations to demonstrate their understanding of mathematical situations. The Serial Review in the "Elaborate" section allows students to model math situations using drawings or manipulatives to reinforce understanding. For example, students are provided six blue linking cubes and six red linking cubes (color to represent icing color). Students use a Cupcake Story Mat and linking cubes (blue and red) to determine and create concrete models of all the different combinations of six.

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

The materials provide opportunities for students to demonstrate their understanding of the content and to extend their knowledge through exit ticket tasks. These allow students to apply conceptual understanding to new situations, developing flexibility in their thinking, critical reasoning skills, and the ability to make connections across mathematical concepts. In addition, students describe measurable attributes of objects, including length, capacity, and weight. Student tasks and questions apply the conceptual understanding to real-world applications and higher-order thinking, such as asking students to categorize items by distinguishing them with measurable attributes. For example, students explain that a backpack can be measured by length, weight, and capacity, while a pencil can only be measured by length and weight.

The materials provide a "Math Chat" section that allows students to share their observations and learning through teacher-facilitated questioning. This allows students to deepen their knowledge of a variety of mathematical concepts and to ensure their understanding. The materials provide questions and tasks that require students to create pictorial models to count objects. For example, students are required to draw a picture and write the numeral that represents how many objects were counted by completing the sentence structure.

The materials include instructions for students to use linking cubes to count forward and backward within 20. Students add links and count forward as they attach additional links. Students then remove a link at a time to count backward. Students continue to learn to count forward and backward by completing the student journal sheet, where students insert missing numbers (as they are displayed, increasing and decreasing). For those students who are ready to apply understanding to a new context, teacher guidance is provided so that students may extend their counting forward to 100.

5.2 Development of Fluency

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

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

The materials include a Show What You Know activity that aligns with the "Explore" concept of the same name. Students build their understanding of the content, and teachers analyze data based on student performance. This activity builds fluency and automaticity to complete grade-level tasks. In the Fluency Builder activity, students demonstrate their understanding and build fluency in the given content area. In addition, students are able to increase their fluency and automaticity of subtraction facts by using an online assessment. For example, in the category of "Minus 0, 1, 2," students are given 26 online questions such as "__ = 10 - 2," "9 - 0 = __," or "15 - 1 = __." Students are provided immediate feedback if their answers are correct by receiving a red or green dot after answering each equation. After answering the set of questions, the students receive a final percentage grade.

The materials include lessons that help them achieve fluency and automaticity for adding and subtracting within 20 by using mental strategies. For example, in "Making Related Facts" within 10, students use nine linking cubes and scenario cards to create addition and subtraction facts. A student may design a train by connecting the nine linking cubes in two different amounts (i.e., 4 + 5 or 3 + 6) and then record their total on a Flip the Train recording sheet. Additionally, students can also work on subtraction problems, such as pretending a train crashed and breaks apart. The student then uses nine linking cubes to show two different ways the separation of nine can be shown, and then they record this on their Flip the Train recording sheet.

The material includes scope opportunities for students to build their automaticity and fluency to complete grade-level mathematical tasks. The materials include a sequential order of teaching the facts for automaticity and fluency. In addition, students are able to engage in fluency and automaticity practice with virtual manipulatives and drawings.

5.2b – Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures throughout learning pathways.

The materials include a varied representation to help students develop multiple ways of representing a collection of objects using a method considered most appropriate for them. For example, students count

various collections of objects up to 10. They describe multiple ways in which they counted and organized objects—for example, using a ten frame, using a space, or using a counting strip.

The materials include the use of digital lessons and practice counting. In the interactive practice, students pretend to feed fish. As students feed each fish, the number of fish fed is sounded out, and the word form and the number fed are also displayed. If the student does not match the number of fish fed correctly, immediate feedback is provided so they can look at the word form of the number of fish fed to determine how many more to feed.

The materials include the "Explore" lessons, which provide students with efficient, flexible, and accurate procedures throughout the learning pathways that build on one another to allow students to complete more complex concepts. Within each "Explore," students participate in partner work using manipulatives, teacher-facilitated math chats, student journal engagement, and exit tickets to build on their understanding of the concept. For example, students practice counting up to 10 using pictures. Students previously learned one-to-one correspondence from one to 10 with real objects.

5.2c – Materials provide opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy throughout learning pathways.

The materials include DOK questions that are teacher-facilitated during the "Explore" Math Chats. These chats allow students to evaluate their learning and engage in the learning process efficiently, flexibly, and accurately throughout the scope concept. For example, students count up to 10 objects forward and backward within 20, beginning with any number. Students can use the counting mats and number path to help them count. Students use bags of linking cubes and count them, then locate a number card that displays the number in standard form. In addition, students are asked by the teacher, "How did you count the objects? How does the ten frame or counting strip help organize your collection? Which mat was easier to use to count your collection? Why did you choose that mat?" These questions and exercises guide students to reflect on the tool they selected and determine which strategy was most efficient for them.

The materials include an Observation Checklist that allows students to self-assess their understanding of the concepts in each "Explore" section. While engaging with the lessons, students use the checklist to evaluate various mathematical approaches, which develops their critical thinking and problem-solving skills. For example, students can show their depth of understanding of grade-level TEKS through assessments, virtual manipulatives, and structured conversations.

The materials include students' models and solving part-part-whole problems using objects and a story map. For example, students use Panda Bear cut-outs, a Story Map, and Task Cards to work on addition problems. Students work on six problems in their Student Journals. After completing the problems, the students share their strategies. Students ask each other questions and make connections, finding

similarities and differences in the processes they used to solve their problems. These conversations help students evaluate their representations, models, and strategies used to solve their addition problems.

5.2d – Materials contain guidance to support students in selecting increasingly efficient approaches to solve mathematics problems.

The materials include the Content Support page to assist teachers with supporting students by selecting increasingly efficient approaches to solving mathematical problems. Having multiple approaches to problem-solving allows students to gain confidence in working through mathematical challenges. For example, students begin by learning to count by using one-to-one correspondence. As the numbers get larger, students learn that numbers can be grouped into groups of 10. Students learn to count forward to 100 by tens. The counting forward and backward by students will be used to teach addition and subtraction strategies later.

The materials include guidance to help build students' understanding of composing and decomposing numbers to 10. Students build on accessing their prior knowledge of composing and decomposing numbers less than 10. From there, students increase the amount to 10. For example, using "Explore 5," students pretend to be collecting bugs, and then analyze different combinations of 10 bugs in a jar. Students extend this skill of composing and decomposing collections of 10 with other concrete objects.

The materials include a Take-Home Letter for parents to work on concepts with students. The Take-Home Letter supports the teacher's guidance on selecting increasingly efficient approaches to mathematical problems.

5.3 Balance of Conceptual Understanding and Procedural Fluency

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

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

The materials explicitly state how the procedural emphasis of the TEKS is addressed. The Content Support page guides teachers in answering both the "why" and the "how" of the concept, facilitating student understanding. For example, the "Using Models to Join and Separate" section provides procedural examples for educators to guide students in demonstrating.

The materials include the lesson description highlights with a conceptual emphasis for composing and decomposing numbers to 10. Students use cutouts of pictures of bananas in different amounts. For example, students attach two different pictures of bananas to add up to seven, such as a picture of five bananas and a picture of two bananas. The procedural component occurs when students transition to writing equations that reflect their picture models, such as "2 and 5 is the same as 7" or "3 and 4 is the same as 7."

The materials also include the lesson overview where students use counting bears, pattern blocks, and linking cubes to learn to count within 10. For example, students begin by selecting a bag with a number card in it and fill the bags with the correct number of items as noted on the card in the bag. The lesson highlights procedural emphasis when students are asked to make a drawing that represents their objects, and they are also asked what numeral they used to represent the number of items counted.

5.3b – Questions and tasks provide opportunities for students to use concrete models, pictorial representations, and abstract models as required by the TEKS.

The materials include opportunities for students to use both concrete and pictorial models to solve problems that are TEKS-aligned. For example, in Number 3 of the Procedure and Facilitation Points, students are asked to use their manipulatives, and in Number 6, they are asked to draw circles when representing a number that is more than, less than, or equal to a number up to 10. Students may continue to use manipulatives if needed for the Explain activity, where students create a pictorial model by drawing the number of circles that represent an amount less than a given number, and an amount more than the given number.

The materials include opportunities for students to use abstract models to solve problems that are TEKS-aligned. For example, students compare numbers to 20 by using the School Bus Story Mats and Picture Cards to create a concrete model of a school bus with students. Students are then directed to draw the model by using an "X" to represent each student on the bus. Finally, students indicate the abstract model of the problem by using digits to indicate the number of students on the bus.

The materials include opportunities for students to use abstract models to solve problems that are TEKS-aligned. For example, in "Explore 3" of Join and Separate, Number 7 of the Procedure and Facilitation Points guides students to complete number sentences in their student journals.

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

The materials include support for students in connecting concrete and representational models to abstract (symbolic, numeric, algorithmic) concepts, as required by the TEKS. In the Join and Separate scope, the Procedure and Facilitation Points guide students through a process of making a connection between the varying models. For example, students work through solving a problem utilizing manipulatives, task cards, and their student journals to show the concrete, pictorial, and abstract models to solve the problem. Students are provided with bags with a card containing a number. Students use a variety of manipulatives and count the exact amount on the card, and place the manipulatives in the bag. Students then exchange their bags with another student, so they each verify that the count matches the number on the respective cards. Students use their student journal to make a drawing of a bag they worked on and draw a picture to represent the items, as well as represent the abstract form of their problem by indicating the number(s) they counted.

The materials include connections between concrete models, representational models, and abstract models by beginning to count to 20 forward and backward. For example, students select one of many pre-filled bags with counting bears. As students pull one bear out at a time, they write the number on their whiteboards to indicate their understanding. Students look at all the bears pulled out of the bag and state the total number. Students then use the Checkup sheet to count objects and abstractly show the amount. Additionally, students can use the Checkup sheet to draw a set of objects to represent the number shown on the sheet and show the number using a ten frame.

The materials include the Serial Review that allows students to model math situations using drawings or manipulatives to reinforce understanding. The spiral review connects the learning from previous concepts to the current content. For example, students use linking cubes and pipe cleaners when representing a number that is more than, less than, or equal to a number up to 10. After using the manipulatives, students draw a picture of their representation. Then, students complete a worksheet by writing numbers that are more than, less than, and equal to.

5.4 Development of Academic Mathematical Language

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.4a	All criteria for guidance met.	1/1
5.4b	All criteria for guidance met.	2/2
5.4c	All criteria for guidance met.	1/1
5.4d	All criteria for guidance met.	2/2
5.4e	All criteria for guidance met.	2/2
—	**TOTAL**	8/8

5.4a – Materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, or other language development strategies.

The materials provide students the opportunity to develop their mathematical language skills using manipulatives, visual representations, and other resources to help with understanding the concepts. For example, students use a story map of a plate and picture cut-outs of cookies to learn to join and separate amounts. Students select a Task Card and use the manipulatives to work out the problems of addition and subtraction. While working on the problems, students learn math vocabulary terms such as 'have left,' 'six more,' and 'have now,' which helps students with the process of adding and subtracting.

Another example, every scope includes picture vocabulary in the "Explain" section, offering embedded language supports that help pre-teach academic vocabulary. These visuals are paired with clear educator guidance to support students' understanding of key terms and unfamiliar concepts. For example, students use blue and red linking cubes to compose and decompose the number six. The educator introduces this activity by using guiding questions such as "What do you think the word compose means?" and "What do you think the word decompose means?" Students use the guiding questions to talk with their partners and explore the manipulatives.

The materials include a picture vocabulary resource, which allows students to build on prior knowledge to learn new vocabulary words. This includes both the new vocabulary word and an illustration to further emphasize the meaning. For example, students use sets of Picture Cards with one set of cards having pictures of cookies and another set having phrases, such as "1 is less than 2," "3 is less than 5," or "10 is greater than 7." As students turn over two cards, they keep the set if the picture and phrase match, and they continue to look for matching pairs. Students develop fluency in numbers and math language as they work with the following terms: 'less than,' 'more than,' 'greater than,' and 'equal.'

5.4b – Materials include embedded educator guidance to scaffold, support, and extend students' use of academic mathematical vocabulary in context when communicating with peers and educators.

The materials include guidance on how to support and extend students' academic language through lesson instructions. Teachers conduct a lesson for students to use a balance scale to compare the weight of objects. As teachers guide the students through the lesson, they provide students with language supports. For example, sentence frames, such as "The ___is heavier/lighter than the ___" or "The __weighs more/less than the___."

The materials include guidance for teachers to scaffold the use of academic mathematical vocabulary by including additional supports. For example, in the "Language Support" section, the materials recommended for teachers are to "consider color coding the words more with blue and less with red."

The materials include support for the use of academic mathematical vocabulary by using structured conversations. The materials provide sentence structures to support students with words. For example, in the Explore 2 activity, in the "Language Support" section, the sentence structures provided are "Partner A: How did you model the problem? Partner B: I used a ___ to model the problem."

5.4c – Materials include embedded guidance to support student application of appropriate mathematical language and academic vocabulary in discourse.

The materials include a guide for teachers to facilitate structured conversations with students and conversations between students and peers. Several activities are included in the Structured Conversations that provide opportunities for students to use academic vocabulary to engage in the discourse and to further strengthen their understanding and engagement with the content. For example, sentence structures/stems that allow students to properly engage in the conversations while maintaining the integrity of the academic language.

The materials include a "Math Chat" section where educators use guiding questions to prompt students to justify their answers using vocabulary words about addition and subtraction. For example, one of the questions is "Looking at one of the problems, what were the parts? What was the whole?" The students engage in Math Chats where they ask questions and have opportunities to share their observations and learning.

The materials include interactive games that provide different pairs of pictures of different scenarios, such as one child sweeping and one watching television. As the student works with the interactive game, they are asked, "Which one earns money?" The students select the picture that shows someone who could earn money through work. When the students select the correct answer, the job being performed is described to the student.

5.4d – Materials include embedded guidance to facilitate mathematical conversations allowing students to hear, refine, and use math language with peers.

The materials include embedded guidance to facilitate mathematical conversations, allowing students to hear math language with peers. The Structured Conversations activities allow educators to select an appropriate activity for the students to engage in. That will allow them to have a conversation with their peers while demonstrating their knowledge of the given concept. For example, the Walk, Talk, Decide activity has students walk around the room while having a structured conversation with their partner, which allows them to move and process their learning at the same time. The teacher prepares the questions and prompts to complete the activity.

The materials include the *Teacher Toolbox* with the Back and Forth structured conversation activity, where students explain their understanding and clarify misconceptions with peers. This task supports opportunities for students to interpret and analyze mathematical models and representations through guided peer discussion. For example, the "Communicate Math–Discourse" section provides prompts and sentence stems to help students share and refine their math thinking with peers. The materials include math chats where students ask questions and share their observations and learning. For example, students sort data into two or three categories and conclude from their constructed graphs. Students work in pairs in constructing their picture graphs and then share what they know about their graphs. Teachers can facilitate discussion through questions: "What could we title this graph? How many objects are shown? Which color/type has the most/least?"

5.4e – Materials include embedded guidance to anticipate a variety of student answers including exemplar responses to questions and tasks, including guidance to support and/or redirect inaccurate student responses.

The materials include embedded guidance that provides numerous questions for teachers to use when having students count, read, write, and represent whole numbers from zero to 20. Teachers are also guided to check for student misconceptions. For example, when students compare sets with small differences up to 20. The anticipated responses are distinguished by providing the questions in black and anticipated student responses in red. Additionally, in Procedure and Facilitating Points, teachers are reminded to monitor and talk with students to check for understanding. Teacher questions to assess student understanding are provided.

The materials include embedded guidance to anticipate a variety of student answers, including exemplar responses to questions and tasks. For example, one of the questions is "Were any of the numbers the same? If so, give an example." Educators are then guided to redirect and support student responses. For instance, one of the guiding supports states, "This is a perfect opportunity to explain that the order of the numbers does not matter and that the same combination of numbers will always equal six."

The materials include teachers’ guidance to listen to students' explanations and use guiding questions to help understanding. Guidance is provided to anticipate student answers when students compare sets with small differences up to 20. The "Math Chats" found in the "Explore" section of the grade-level scopes provide teachers with prompts to ask students. The Sample Student Responses column in the "Math Chats" gives teachers the possible answers students may give pertaining to the concept discourse.

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.	1/1
—	**TOTAL**	4/4

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

The materials include the TEKS process standards that are integrated appropriately. Integrating the TEKS process standards into instructional materials ensures that students develop critical thinking, problem-solving, and mathematical communication skills alongside content knowledge. For example, the Process Standards—Display, Explain, and Justify Mathematical Ideas provides teachers guidance and allows students to use "mathematical processes to acquire and demonstrate mathematical understanding."

The materials include guidance to teachers to help students integrate process standards by using previous knowledge.. Teachers have students begin to count objects to expand mathematical vocabulary, while counting forward and backward to 20 (content). Teachers then provide students with activities where students begin to read, write, and represent numbers to 20 (process).

The materials include the integration of the TEKS process standards throughout the activities in the scope. For example, in the "Represent Numbers to at Least 20" scope, students use everyday life situations to represent numbers to 20. For example, students work in pairs to use cards and match pictures, numbers, or words. For example, students can match a card with a picture of 10 ducks with a card with the number "10" or a card with a picture of nine trucks and a card with the number "9" (content). After students have made their matches, they can record some of the matches in their recording sheet. Finally, students explain some of their matches by sharing them with their partners (process).

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

The materials include a Scope and Sequence table that outlines and explains how the kindergarten process standards are embedded throughout the course, showing alignment to the content standards by connecting new learning with prior learning and reinforcing concepts. Teachers can support students in applying process standards to demonstrate their understanding.

The materials include an "Implementation Guide" that outlines how the curriculum incorporates the process standards throughout the learning pathways. Under the Mathematical Process Standards, process standards are woven throughout the curriculum to create effective thinkers in math. For

example, students are expected to use these process standards to apply mathematics to problems arising in everyday life, society, and the workplace.

The materials include a description of how the process standards are incorporated into the learning pathways and are outlined to guide educators in reinforcing the skills throughout the different scope lessons across concepts. The "Content Support" guide informs educators on how the standards will be applied and explains the purpose of lesson components that integrate the process standards into daily practice.

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

The materials include an overview of the TEKS process standards incorporated into each lesson. In the Content Support page in each grade-level scope, there is a section titled, "Applying Mathematical Process Standards," where educators can integrate the standards to reinforce students' problem-solving, reasoning, and communication skills. For example, after the list, process standards are listed, and examples are provided. For example, in the lesson Count Objects, examples of TEKS K–1C show how students can count and organize counted objects by arranging them as either structurally arranged or not structurally arranged.

The Content Support tab for educators explains the purpose of lesson components that integrate the process standards into daily practice. In the lesson, Join and Separate, teacher guidance, under Key Concepts, provides process standards students can use in the lesson. For example, students can "Draw pictures or use objects to show how to join and separate" and "Explain strategies used to solve addition and subtraction problems by using words, models, and number sentences."

The materials include support for students to use mathematical process standards to acquire and demonstrate mathematical understanding. In the grade-level scope, the "Explore" section provides the Mathematical Process Standards, which allow educators to help make connections between mathematical concepts and real-world applications while fostering deeper understanding for students.

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.	3/3
6.1c	All criteria for guidance met.	3/3
—	**TOTAL**	9/9

6.1a – Materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics.

The materials include an overview to explain the importance of purposeful questioning as a tool to stimulate, challenge, extend, and clarify mathematical thinking. For example, students are asked to sort two-dimensional shapes and discuss questions, such as "What attributes did you notice when you looked at all the stickers?" and "How did you group these stickers?" Students engage in mathematical thinking and work through solving the problems.

The materials include opportunities for educators to encourage students to develop a deeper engagement and understanding of the mathematical concepts. In the grade-level "Explore" section, students and educators participate in Structured Conversations that allow students to interact with their classmates while thinking mathematically, problem-solving, and making sense of the mathematical concepts. For example, students work with a problem where a person has 16 pieces of gum and needs to figure out how many pieces are left if the person chewed seven. After students solve the subtraction problem, the teacher has the students think mathematically and solve the problem through other methods that help students have a stronger conception of comprehension by having students create the math problem by creating a concrete/pictorial model, using a number line, diagram, or number bond.

The materials include Student Journals that allow students to document their problem-solving processes, strategies, mistakes, and revisions over time. These guided journals allow students to think mathematically, persevere through solving problems, and make sense of mathematics. For example, students make sense of mathematical facts within 10 by thinking mathematically of related inverse operations. Students begin by listing facts they are aware of. For example, students write "4 + 4 = 8" or "6 + 3 = 9." After students have made a list of nine facts they are aware of, they think of the related subtraction facts. Students make math connections by writing "4 + 4 = 8 is related to 8 - 4 = 4" or "6 + 3 = 9 is related to 9 - 3 = 6."

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

The materials include an overview to explain the importance of purposeful questioning as a tool to stimulate, challenge, extend, and clarify mathematical thinking. For example, students learn to count objects and understand that there are various ways to solve addition problems. For example, students start to count a group of objects by touch counting. Students then use ten frames and also explain that the number of items will still be the same even when they are mixed and not structurally arranged.

The materials include a variety of approaches to convey knowledge, strategies, justifications, and conclusions. In the Spiraled Review, students have the opportunity to show what they know and to demonstrate their understanding with multiple strategies. The Spiraled Review questions suggest that "Answers may vary," giving students options in how they want to explain and justify their answers. For example, students solve tasks by counting manipulatives inside a bag, then are asked to count to 10 in a variety of ways: one by one, grouping by twos, or two groups of five. Also, students are asked to count to 10 starting at three instead of one.

The materials support students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks. For example, students could use linking cubes to represent a concrete model of their addition problem or draw a pictorial model to explain their thinking when solving an addition problem. The teacher could check students' understanding by asking them to express their solution with questions such as, "Can you explain how you solved the problem? What picture did you draw to represent the problem? What strategies did you use to solve each problem?"

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/or educators.

The materials include opportunities for students to write about mathematical concepts with their peers and educators. The "Communicate Math–Writing" section allows students to share their mathematical ideas with others, use appropriate visual representations, and use sentence stems to accurately write about the given concept. For example, students decide how they want to sort fish crackers. The teacher encourages students to notice the similarities and differences between each fish cracker. Then, the students use a real-object graph to organize the data for their fish. Students then use a whiteboard and dry-erase markers to label their graph and write a title. Finally, students compare their graphs with their partner and discuss the guiding questions. The materials are designed to require students to engage in writing prompts that address a variety of concepts and mathematical relationships.

The materials include opportunities for students to do and discuss math with their peers and educators. For example, students are asked to use linking cubes to construct models of numbers for comparison. Students then use their handout and write comparison statements. Students follow on to compare their

comparison statements with other students. The lesson is extended by the teacher asking questions to check for understanding.

The materials include the "Procedure and Facilitation Points" section, and students are encouraged to work with their partners while doing and discussing mathematical concepts. For example, students are asked to work in pairs and are given linking cubes and task cards. Student pairs use Task Cards and linking cubes to solve addition and subtraction problems. Students follow up by using their Student Journal to make a pictorial model, complete strategy sentences by filling in blanks with words or numbers, and write equations for their problems. The teacher monitors students and checks for understanding using provided guiding questions.

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 educators in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications.

The materials include support for educators in guiding students to share and reflect on their problem-solving approaches. The "Communicate Math–Discourse" section provides educators with an overview, facilitation clarification, and expectations for the discourse. Students are encouraged to engage in conversations that allow them to explain, justify, and reflect on mathematical concepts while sharing their problem-solving strategies. For example, students work to determine if generated numbers are greater than, less than, or equal to. The teacher has the students reflect on what they know about the concepts of comparison based on prior lessons. Students are provided with 20 counters of two colors. One color has more than the other. The teachers have students explain which color has more than the other color. Students justify their response to the teacher, asking, "How did you decide which number was less than or greater than the other number?"

The materials include opportunities for students to work alongside their peers in discussing mathematical concepts. For example, students work in groups of three to four and use different counting mats to count objects in bags. Once they have counted the number of items in bags, students can justify their choice of mat by answering, "How did you choose which counting mat to use with each collection?" Students may argue their selection by stating the pros and cons of the counting mat used. Students can also explain by answering, "Can you explain your strategy for counting one of your collections?"

In another example, students engage in the task by turning and talking to share how they would solve addition and subtraction problems. After the students share and reflect on their problem-solving strategies, they are expected to solve the problems with manipulatives. Students are then asked the following questions to discuss with the whole group: "How did you solve this problem?" and "How did you represent this problem with a picture?" The materials support educators to guide students to share and reflect on their problem-solving methods. For example, the Observation Checklist allows students to demonstrate their learning through discussion, problem solving, writing, and more.

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

The materials provide educators with prompts for small-group interventions. The educator observes students and identifies any misconceptions there may be over the grade-level concept. The prompts then

have educators guide, question, and model (give feedback) based on student work. For example, teachers are provided guidance with suggested questions to ask students when comparing capacity. Possible student responses to the questions are provided to the teacher in red print. The teacher is also guided to check for misconceptions in Procedures and Facilitation Points: "Allow the students to ask questions and clarify the context as needed. Encourage them to share their thoughts and experiences with the class with the following questions: "How can you explain which cup holds more water?"

The materials include the "Instructional Supports" section in the grade level "Explore" that gives educators extra guidance to ensure students are understanding the concepts. For example, in grade K, Number 8 of the "Instructional Supports" guide has educators seeking "opportunities to emphasize how hard students are working and the benefit of productively struggling when learning something new." "Monitor and talk with students as needed to check for understanding by using the following guiding questions . . ." These discussions allow the teacher to provide feedback for anticipated misconceptions. For example, in the Explore 2 activity, the facilitation points state, "Encourage students to notice what is the same and what is different about each fish."

The materials include prompts and guidance for educators to provide feedback to students. For example, students receive prompts from the teacher to help model and solve joining and separating objects on a story mat. After students have solved problems using the story mat, the teacher prompts the students to draw their result and complete a sentence frame in their Student Journal. Afterwards, the teacher can guide the students to verbalize what happened in each problem. The teacher can check for misconceptions by following up with questions such as, "How can you check to see whether you wrote the correct number of cookies for your answer?"