Accelerate Learning Inc.

Supplemental English Mathematics, 2

STEMscopes Texas Math Pulse–Grade 2 English

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Supplemental	**9798330804856**	**Digital**	**Static**

Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	158	3	Flags Not in Report	Not Applicable	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	23 out of 23	100%
2. Progress Monitoring	20 out of 24	83%
3. Supports for All Learners	37 out of 39	95%
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	0	0	0
2. Alignment with Public Education's Constitutional Goal	0	0	0
3. Parental Rights and Responsibilities	0	0	0
4. Prohibition on Forced Political Activity	0	0	0
5. Protecting Children's Innocence	0	0	0
6. Promoting Sexual Risk Avoidance	0	0	0
7. Compliance with the Children's Internet Protection Act (CIPA)	0	0	0

SUITABILITY EXCELLENCE FLAGS BY CATEGORY	IMRA REVIEWERS
Category 2: Alignment with Public Education's Constitutional Goal	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.	5/5
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**	14/14

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 "Grade 2 Scope and Sequence" table includes five sections: "Scope Name," "TEKS Covered," "Explores," "Included Standards," and "Total Instructional Days." The "Scope Name" in the table provides the overall concept covered, and the "Explores" section breaks down each concept into smaller topics. There are 17 Scope Name concepts in the "Scope and Sequence" table and three ongoing Scope Name concepts at the bottom. The ongoing concepts include "Daily Numeracy," "Fact Fluency: Addition and Subtraction," and "Data Science."

The "Grade 2 Course Rationale" provides a summary of each unit and how it connects to previous and future scope materials. For example, the "Grade 2 Course Rationale" begins with the "Represent Numbers to 1,200" scope, which significantly extends the numerical horizon for students and challenges them to compose and decompose numbers in various ways. This scope is pivotal, as it lays the groundwork for understanding place value and the base-ten system that is essential for developing flexible, accurate, and efficient strategies for addition and subtraction.

The "Vertical Alignment Chart" lists the TEKS side by side, displaying how each grade level builds on the previous one to develop students' mathematical knowledge and skills.

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 an *Implementation Guide*, which provides just-in-time supports, such as individualized instruction and assessment. The *Implementation Guide* states, "Another key feature in our curriculum is that both intervention and extension (acceleration) activities are provided. The teacher can individualize their plans by using the 'Scaffolded Instruction Guide' located in each scope to guide instruction based on student data." The *Implementation Guide* also includes an "Intervention" section, which provides the tools teachers can use to support students needing intervention, including supplemental aids, checkup, and small-group intervention. The "Acceleration" section provides tools such as "Math Today!" and "Create Your Own."

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

The "Scaffolded Instruction Guide" provides a table of tiered activities based on Measures of Academic Performance (MAP) assessment or scope assessment data. The table includes four percentile ranges for every TEKS statement within the unit and provides activities based on level. For example, the scope provides these four levels: "0–25 percent (Previous Grade Level Remediation), 25–50 percent (Grade Level with Supports), 50–80 percent (Grade Level), and 80–100 percent (Extending Grade Level)." Each percentile range includes embedded links to activities and strategies, including manipulative practice, interactive games, hands-on activities, and small-group instruction.

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

Each scope provides a "Suggested Scope Calendar" with unit and lesson internalization guidance. The scope internalization guidance provides the same four steps for all scopes within the materials. Internalization steps include the following: "Review the standards addressed in the scope, become familiar with the way the standards are assessed and what demonstrates mastery, review the 'Progression of Learning' found in the 'Scope Overview' to understand how the concepts are sequenced, and determine which resources will be used for practice and assessment."

The lesson internalization guidance includes the same four steps for all lessons within the materials. Internalization steps include the following: "Review the teacher instructions and associated documents; become familiar with the models, tools, and strategies students will use in the activity; consider the purpose of the lesson within the scope, and identify what students must know and be able to do as a result; note areas in which students may need support or enrichment, and plan how to respond."

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

The "Teacher Toolbox," a page providing instruction and guidance to administrators and instructional coaches, provides guidance on planning guides, scope and sequence, and planning for scope calendars. The "Teacher Toolbox" also provides a page dedicated to "Navigating the Digital Curriculum" that includes screenshots of pages and details the different tabs on each page.

The "Implementation Guide" includes information for administration and instructional coaches related to "Scope and Sequence" documents, Suggested Scope Calendars, various instructional calendar options, planning guides, and teacher preparation and planning guides. For example, the "Scope and Sequence" document provides the TEKS, instructional days, mathematical process standards, English Language Proficiency Standards (ELPS), and "Explores" covered in each scope.

1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	All criteria for guidance met.	7/7
1.2b	This guidance is not applicable to the program.	N/A
1.2c	All criteria for guidance met.	2/2
—	**TOTAL**	9/9

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 "Grade 2 Scope and Sequence" table aligns with the TEKS and ELPS, as well as the mathematical processing standards. For example, grade 2 Scope 2.6AB, "Multiply and Divide," includes TEKS 2.6A and 2.6B; ELPS 1. ABCFG, 2. CDEHi, and 3. BCDEFHJ (in Explore 1); and MPS 2.1ABD (in Explore 1).

Detailed lesson plans with learning objectives, teacher and student materials, suggested timeframes, and assessments aligned to the TEKS and ELPS are present within the Suggested Scope Calendar in each scope. In Scope 2.6AB, the objective for day 2 is "students solve repeated addition and subtraction equations," and the suggested time stamps are "Warm-up Options (5–10 minutes), Whole Group (45–60 minutes), Small Group (15–30 minutes), and Assessment Options (5–15 minutes)."

When selecting a specific tab for the 5E lesson, teachers are provided with a detailed plan giving standards, materials for both the teacher and students, guidance for questioning with answers, instructional steps, instructional supports, and language supports. The lesson design for each scope is in a 5E model. For example, in the "Explore" lesson of the grade 2 scope area, "Cover Rectangles with Squares" provides the process standards, materials needed, preparation needed, "Procedures and Facilitation Points," Depth of Knowledge (DOK) questioning, "Exit Tickets," "Instructional Supports," and "Language Supports." Within the "Evaluate" tab in each scope, there are selections for "Observational Checklist" and "Skills Quiz" to allow the teacher to evaluate student understanding.

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).

Within each scope, the materials include a Take-Home Letter in English and Spanish with an overview of the scope, vocabulary, and at-home activities to reinforce learning. For example, the Take-Home Letter for Scope 2.9G includes "Tic-Tac-Toe: Try This at Home," which includes activities such as "Label the Clock" and "What Time Would You."

The Take-Home Letter under the “Home” section in the grade 2 “Area” scope provides families with background information for calculating area and examples of problems found within the scope. It includes a tic-tac-toe game featuring real-world activities for calculating area. Both the letter and the game are available in English and Spanish.

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	The materials do not allow teachers to enable and disable accommodations, such as text-to-speech, content, and language supports for individual 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 list, define, and provide the purpose of the instructional assessments in the Implementation Guide. The assessments are classified as formative, diagnostic, or summative. For example, the materials list "Accessing Prior Knowledge" as a diagnostic assessment and provide the purpose as "a brief probing activity to gauge students' prior knowledge before engaging in the content of the scope."

The Implementation Guide lists, defines, and provides the purpose for "Outside the Scope Assessments." These assessments include "Benchmark Assessments," "Pre-Assessments," "Mid-Assessments," "Post-Assessments," and "Growth Measure Assessments." For example, the materials explain that the three Benchmark Assessments provide "meaningful data that can be used to inform instruction in the classroom."

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

The materials include guidance to ensure consistent administration of instructional assessments by providing Procedures and Facilitation Points for each assessment within the scope. For example, in Scope 2.8BD, "Three-Dimensional Solids," the Procedure and Facilitation Points for the Skills Quiz include the following: "1. Distribute the Student Handout to each student. 2. Prompt students to show what they know when completing the assessment. 3. Allow students to reflect on their performances using the 'Heat Map.' 4. Once student data has been collected after the assessment, refer to the 'Scaffolded Instruction Guide' in the 'Home' section of this scope to differentiate instruction for each student."

The materials provide scripts to ensure consistent administration of instructional assessments. For example, "Show What You Know" assessments are provided within each scope. Each Show What You Know comes with Procedure and Facilitation Points. For example, in Scope 2.11ABCDEF, "Show What You Know, Part 1: Save vs. Spend" has the following Procedure and Facilitation Points: "Reading assistance may be needed for some students to complete this activity. Students should individually complete the Show What You Know activity that correlates with the Explore activity already completed. Provide manipulatives as needed, especially those manipulatives used in the Explore. This element can be used to assess whether intervention is needed for each student."

The Skills Quiz is "[a] standards-based assessment to determine the student's ability to solve mathematical problems efficiently and accurately." The Skills Quiz measures what it is designed to measure and is an accurate assessment. For example, in the grade 2 "Multiply and Divide" Skills Quiz, students are asked to solve Question 2 by creating a model of the division problem. The problem states, "MaryAnne has 24 star stickers and wants to split them evenly on four sheets of paper. Model how she can figure out how many stickers go on each sheet."

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.

The materials provide digital and print versions of assessments. For example, in Scope 2.8ACDE, Exit Tickets, checklists, "Student Journals," and the Skills Quiz can be administered as editable Google files" or print files. When assigning a new assignment, teachers can assign a calculator for student use. The materials provide three types of calculators to assign: a four-function calculator, a scientific calculator, and a graphing calculator.

The materials do not allow educators to enable and disable text-to-speech or content and language supports for individual students. Students can access a selection of accommodations that include changing the font size, text-to-speech, a highlighter, a dictionary, a notetaker, and a calculator.

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

Materials include diagnostic assessments with TEKS-aligned tasks or questions with varying complexity levels by providing one Growth Measure Pre-Assessment and one Growth Measure Post-Assessment as diagnostic or summative "Package Assessments." Each assessment offers multiple questions, and each question is aligned to the TEKS. Within the grade 2 Growth Measure Pre-Assessment, questions include multiple levels of complexity. For example, students are introduced to recall-level questions, such as "Which number is 10 more than 28?" They are also introduced to application-level questions, such as "Tia had 16 balloons. She gave away 9 balloons. How many balloons does Tia have now?" Finally, they are introduced to higher-order-thinking questions, such as "Karim counts 6 white cars, 4 red cars, and 5 black

cars in a parking lot. 6 + 4 + 5 = [ ]. Which is another way to find the total number of cars in the parking lot?" The question types include multiple choice. Tasks include counting numbers in a set and identifying the correct numeral, using models to determine the answer to an equation, using data to draw conclusions from graphs, determining a set that correctly represents an addition or subtraction model, and using a set of objects to create an equation.

Materials include diagnostic assessments with interactive item-type questions or tasks. Three Benchmark Assessments are included as diagnostic or summative Package Assessments. Each assessment offers multiple questions, and each question is aligned to the TEKS. Within the grade 2 Mid-Assessment, questions include multiple levels of complexity. For example, students are introduced to recall-level questions, such as "Name each shape," and application-level questions, such as "What is the value of these coins?" The post-assessment has higher-order-thinking questions, such as "Which of the following problem situations can be represented by the number sentence Ms. Sherman wrote?" Questions are in multiple-choice format. Tasks prompt students to count numbers in a set and identify the correct numeral; use models to determine the answer to an equation; use data to create graphs; identify a set that correctly represents an addition, subtraction, multiplication, or division model; and use a set of objects to create an equation.

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

Materials include multiple TEKS-aligned formative assessment options within each scope that include, but are not limited to, Exit Tickets, observation checklists, and Skills Quizzes. In Scope 2.3ABC, the Skills Quiz contains questions with varying levels of complexity, including partitioning shapes into equal parts, labeling the parts, and coloring examples of shapes partitioned into fractions. For example, Question 1 asks students to partition the rectangle into two equal parts, and after that it asks, "1 section of this object is called ___?" Questions 2 and 3 ask students to partition rectangles into fourths and eighths. Question 4 asks students to color the examples of halves, fourths, and eighths. Question 5 asks students how many fourths it takes to make a whole from the given set, Question 6 asks how many parts are left over, and Question 7 asks how many parts are needed to make another whole. Question 8 asks students to solve a word problem comparing two fractions: "Preston ordered a small pizza and cut it into fourths. Mary ordered a small pizza and cut it into eighths. They both ate one piece from their pizzas. Mary said she ate more pizza. Is she correct? Why or why not?"

Materials include a variety of formative assessments with TEKS-aligned tasks or questions, as well as interactive types of questions or tasks. Multiple formative assessment options are available within each scope, including, but not limited to, Exit Tickets, observation checklists, Skills Quizzes, and extension activities. For example, in Scope 2.6AB, the Exit Tickets for each Explore lesson progress through varying levels of complexity. In the Exit Ticket for Explore 1, students are expected to draw a pictorial model of a multiplication problem, write an equation, and explain it using a sentence frame. In the Exit Ticket for Explore 2, students are expected to solve division word problems by drawing a model, writing an

equation, and explaining the answer using a sentence frame. In the Exit Ticket for Explore 3, students are expected to create a pictorial model for a division problem, explain it using a sentence frame, and write the corresponding multiplication fact using a sentence frame. In the Exit Ticket for Explore 4, students are expected to create their own multiplication word problem, "where the total is missing," and create their own division problem, "separating coins into equal groups." For example, in Scope 2.6AB, the Show What You Know activities progress through varying levels of complexity. They can be completed online or on paper. In "Show What You Know, Part 1," students are asked to read a multiplication word problem, draw a model, write an equation to solve, and complete a sentence frame to explain their thinking. In "Show What You Know, Part 2," students are asked to read a division word problem, draw a model, write an equation to solve, and complete a sentence frame to explain their thinking. In "Show What You Know, Part 3," students are asked to read a division word problem, draw a model and write an equation to solve, complete a sentence frame to explain their thinking, and complete a sentence frame showing the connection between multiplication and division. In "Show What You Know, Part 4," students are asked to write their own multiplication or division word problem based on a picture.

2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	Materials do not include a rationale for each correct and incorrect response.	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 answer keys for each assessment, which provide scoring information and guidance for interpreting student performance. For example, in Scope 2.4CD, the materials provide an answer key for each Exit Ticket, each Show What You Know, "Spiraled Review," "Intervention Checkup," Acceleration, and "Skills Assessment." A rationale for correct and incorrect responses is not included in the materials.

In the "Evaluate" tab of the "Fractions" unit, the Skills Quiz includes an answer key aligned to the student handout. This key provides guidance for interpreting student performance and includes rationales for correct responses. For example, one question states, “Preston ordered a small pizza and cut it into fourths. Mary ordered a small pizza and cut it into eighths. They both ate one pizza. Mary’s slices were smaller.”

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

The materials provide multiple opportunities, such as Exit Tickets and Show What You Know opportunities, to respond to student understanding throughout the scope. For example, in Scope 2.9ABCDE, "Show What You Know, Part 1: Length Using Concrete Objects," students are asked to "[m]easure each object with one-inch tiles. Record your measurements." The Procedures and Facilitation Points state, "This element can be used to assess whether intervention is needed for each student." This opportunity to assess for intervention is available for Show What You Know," Parts 2, 3, 4, and 5.

The materials provide intervention lessons with targeted strategies aligned to each lesson within the scope. For example, Scope 2.9G includes the following lessons: "A.M. and P.M.," "Hour-Hand Clocks," "Hour- and Minute-Hand Clocks," and "Digital and Analog Clocks." After each lesson, the Show What You Know element can be used to assess whether intervention is needed for each student. The intervention lessons within the scope align with each lesson. For example, "Intervention, Part I," is titled "A.M. and

P.M.," Part II is titled "Hour-Hand Clocks," Part III is titled "Hour- and Minute-Hand Clocks," and Part IV is titled "Analog and Digital Clocks." Step-by-step instructions for the lessons are included in each part.

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 provide observation checklists for teachers to track student progress and growth in each scope. For example, Scope 2.9G provides a checklist of each standard covered within the scope. At the end of the checklist, reflection questions help teachers track overall mastery. The questions state, "Is this student proficient in the skills addressed in this scope? If so, what is next for them? If not, how can I support them?"

The materials provide a Heat Map for students to track their progress across Benchmark Assessments. For example, after taking the *STEMscopes Texas Math* "Grade 2 Pre-Assessment," the Heat Map instructions state, "Refer to your answers on the Benchmark Pre-Assessment. Next to each standard, color the question box green if your answer is correct. Color the question box red if your answer is incorrect."

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 provide prompts for teachers to check for understanding throughout lessons and activities. For example, in Scope 2.3ABCD, each Explore lesson has embedded DOK questions for teachers to ask at different points. Explore 1 has prompts and questions such as, "Monitor and talk with students as needed to check for understanding by using the following guiding questions: DOK-1 How many pieces are you cutting your paper into? Answers will vary: 2, 4, or 8."

The materials provide guidance for teachers to check for understanding throughout lessons and activities. For example, in Scope 2.2EF, the teacher guidance states, "If students need support placing the numbers on the open number line, consider adding more benchmark numbers for more accurate placement."

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	The materials do not allow teachers to enable and disable accommodations, such as text-to-speech and content and language supports, for individual students.	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 explicit, data-driven support through the "Scaffolded Instruction Guide" for students not yet meeting proficiency. Using assessment data from scope or MAP testing, students are grouped into four quintiles with targeted recommendations. For example, in Scope 2.2AB, 2.7A, the guide recommends previous grade-level remediation for students in the 0–25th percentile, linking to grade 1 lessons such as “Compose and Decompose Numbers to 120, Small Group Intervention, Parts 2 and 4.” These lessons include clear teacher guidance (e.g., asking students to share what they know about counting to 120 and identifying misconceptions) and provide links to interactive activities and games from prior grade 1 scopes.

The materials provide the teacher within each scope a "Scaffolded Instruction Guide" that gives entry points into the lesson for each level of student understanding based on data from the "Quintile Assessment," Heat Map, or "MAP Growth Assessment" for each TEKS in the scope. For example, grade 2 "Scope Fractions," under TEKS 2.3A, states, "Determine the area of rectangles with whole-number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row." The 0–25th percentile (Previous Grade Level) remediation group guides the teacher to use the "Fluency Builder Fraction Models and Descriptions." The 25th–50th percentile (Grade Level) guides the teacher to use the "Small Group Intervention, Parts 1 and 3." The 50th–80th percentile (Grade Level) guides the teacher to the "Interactive Practice—Galactic Pizza." The 80th–100th percentile (Extending Grade Level) guides the teacher in utilizing Math Today activities.

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 “Picture Dictionary” in the "Explain" tab that supports academic vocabulary instruction through a slideshow or a printable format. Teachers receive guidance for using the vocabulary during lessons, including discussion questions and ELPS-aligned strategies. Each Explore ends with Language Supports to reinforce vocabulary connections.

The materials provide language supports for each Explore lesson. For example, in Scope 2.2, Explore 1, the Language Supports provide guidance for embedding support throughout the lesson, such as "Listen to the conversations within student groups, and collect the language they use as they talk about the data. Record words and phrases with drawings depicting those words, and support students in using them. You may hear the following words from students: *close*, *halfway*, *between*, *before*, and *after*."

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 a "Scaffolded Instruction Guide" in the "Home" tab of each scope, offering explicit guidance for enrichment and extension based on student data. For example, in Scope 2.10ABCD, the teacher's guidance states, "As an extension, allow students to gather their data and present their data using a pictograph and/or bar graph."

The materials provide explicit educator guidance for enrichment for students who have demonstrated proficiency in grade-level content and skills. For example, in Scope 2.11ABCDEF, the teacher guidance is located within the "Acceleration" tab. It states, "Students explore connections and applications of math and other cross-curricular content through interactions with authentic, real-world media provided by Associated Press."

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 materials do not allow educators to enable and disable text-to-speech or content and language supports for individual students. Students can access a selection of accommodations that include changing the font size, text-to-speech, a highlighter, a dictionary, a notetaker, and a calculator.

The digital version of the Skills Quiz allows students to use the toolbar at the top of the screen to turn on the dictionary function, enable text-to-speech, highlight text, and change the font size. Teachers can only turn on and off the calculator function. For example, in Scope 2.3ABCD, the teacher can assign the Show

What You Know assignments, which have the option to assign a calculator. Text-to-speech, font size, and online dictionaries are embedded within the assignment.

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 provide opportunities for students to demonstrate understanding of mathematical concepts in various ways. For example, in Scope 2.2CD, 2.7B, students are able to demonstrate their understanding of comparing numbers using manipulatives (rekenreks), using verbal explanations, drawing pictorial models, and writing.

In the "Teacher Toolbox" for each grade level, the "Process Standards" section provides educators with detailed explanations of each process standard, including guidance on what teachers should do, instructional suggestions, and examples from lessons that illustrate how each standard is applied in classroom instruction.

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 provide explicit prompts and guidance for educators to build prior knowledge. For example, in Scope 2.5AB, the lesson activates students' prior knowledge with the following prompt about counting coins: "What do you already know about coins and counting to find the value of a collection of coins?" Explicit guidance supports the teacher in anchoring big ideas and building student knowledge: "Monitor and talk with students as needed to check for understanding by using the following guiding questions: What coins do you see in this collection? Three dimes, one nickel, and six pennies. How are you ordering your coins to make skip counting easier?"

The materials provide explicit prompts and guidance for educators to anchor big ideas and highlight and connect key patterns, features, and relationships through multiple means of representation. Each lesson is anchored in a "Phenomena" activity. For example, in Scopes 2.4C and 2.7C, the Phenomena shows some children playing an arcade game. Students watch the video, and they answer questions related to the Phenomena and add or subtract numbers. For example, guidance for educators states, "Show the phenomena. Ask students the following questions: What do you notice? Where can you see math in this situation? Allow students to share all ideas. Present a scenario where Kayla scores 246 points in her first arcade game and a total of 693 points across two games. Ask students to find how many points she scored in the second game using a diagram or open number line to show their work." Throughout the scope, students will use their knowledge to add or subtract using multiple means of representation. For example, a question at the end of the "Hook" asks, "How are both of these representations similar?"

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

The materials provide various instructional approaches, including collaboration, "Structured Conversation," and direct instruction. For example, in Scope 2.9G, Explore 3, students work in groups to

find the time on analog clocks. The guidance states, "Help students access the task by asking the following guiding questions: Have you ever flown on an airplane? What was it like? Where did you go? Can you describe the things you see at an airport? What do you already know about telling time to the hour and half hour? Pair students and have them explore the 'Arrivals and Departures' chart and geared clocks. Ask them to read each flight time using the clocks and discuss their thinking with a partner. Check understanding by asking, 'What do you notice about the clock for this flight?'" Then, they engage in a conversation with the following teacher guidance: "Choose a Structured Conversation routine to facilitate the following question, 'When would you need to know how to read a clock outside of school?'" If students need additional support, the teacher has Intervention lessons that include direct instruction for students. For example, Part 1 of the Small-Group Intervention lesson states, "Instruct students to sort all the cards into two categories: a.m. and p.m. Tell students to sort the activities on each card by placing them into the correct column on the sorting mat table. Watch and listen to each pair as they sort. Discuss the following questions: What activities did you identify as happening in the a.m.?"

The materials provide various instructional approaches, including collaboration, Structured Conversation, direct instruction, and games. For example, in Scope 1.8ABC, students work with a partner to collect and sort data. Teacher guidance states, "[R]ead the scenario: You've been hired as a designer for a landscaping company. A family wants to remodel their backyard to include grass, a patio, a firepit, a vegetable garden, and a flower bed. Your task is to measure each area on a scaled model and report the measurements. To help students engage, ask, 'Do you have or have you seen a backyard? What did it look like?'" Then, they engage in a conversation with the following teacher guidance: "Choose a Structured Conversation routine to facilitate the following question, 'Why is it important for the tiles to be lined up neatly, with no gaps or overlaps?'" The materials also provide students with interactive games that review the content taught. For example, in Scope 2.9F, one interactive game is called "Interactive Practice - What's the Data," and students choose their unit of measurement and measure different objects.

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

The materials provide multitiered intervention methods, including small-group, collaborative, and individual opportunities. For example, in Scope 2.2CD, 2.7B, the Intervention lessons include guided, collaborative, and independent practice in addition to instruction within small-group, partner, and individual settings. Educator guidance suggests that if students struggle with greater than or less than, review vocabulary with clear examples and nonexamples. Use pictures or items for students to label and explain their reasoning. For those needing extra help with larger numbers, start with smaller numbers first. To support finding more or less, revisit the "Skill Basics" on using a hundreds chart in small groups or individually.

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

The materials provide enrichment and extension materials to promote engagement, and they provide educator guidance for each activity. For example, in Scope 2.4AB, the Acceleration tab provides a real-world scenario for students to explore. Students will watch a video and work with a partner or group to answer related questions. The teacher's guidance states, "[A]llow students to watch the video about the world’s largest LEGO light bulb at a famous Washington, D.C., museum. Briefly explain the project, then ask questions like, 'What do you wonder while watching?' and 'Where do you see math in this video?' (e.g., counting LEGO bricks, measuring size, tracking build time)." Students complete the Student Handout independently or with a partner.

The materials provide enrichment and extension materials to promote engagement, and they provide educator guidance for each activity. For example, in Scope 2.2AB, the Explore 3 lesson provides an opportunity for extension. The teacher guidance states, "If time allows at the end of the Explore, challenge students to create their own set of cookie orders. Have them draw the model and determine the total number of chips, cookies, or the number of chips on each cookie."

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

The materials provide guidance to support educators in providing feedback within the lesson. For example, in the Explore lessons in Scope 2.2AB, 2.7A, the materials provide guidance, such as "Monitor students, and check for understanding as needed using the following guiding questions: DOK-2 How are you grouping the seeds from your cup?"

The materials provide guidance to support educators in providing feedback within the lesson. For example, in the Intervention lessons in Scope 2.8ACDE, the materials provide guidance, such as "Watch and listen to each pair of students as they match the cards. Discuss the following question: 'What are the attributes of a square?'"

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	All criteria for guidance met.	4/4
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**	13/13

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.

The materials provide instructional guidance to support students at varying levels of linguistic ability. In Scope 2.9G, Explores 2–5 align with ELPS 3.C, which focuses on using high-frequency words, cognates, and content-area vocabulary to comprehend written classroom materials. Educator supports include modeling fluent, expressive reading and using echo reading to build fluency. Teachers are encouraged to provide additional visuals when needed and to clarify concepts, such as a.m. and p.m., using anchor charts and explicit explanations (e.g., "a.m." means before midday, and "p.m." means after midday). Vocabulary and fluency supports are embedded throughout group work activities. For instance, teachers are guided to explain homophones, such as *hour* and *our*, and make cross-linguistic connections for Spanish and Portuguese speakers (e.g., *hour* and *la hora*, *minute* and *el minuto*). Students also receive scaffolded support while following along with texts, such as pointing to words during read-alouds and using manipulatives like clocks to demonstrate understanding.

The proficiency level descriptors outline expectations for emergent bilingual (EB) students at different stages of language acquisition. At the preproduction level, students match pre-taught vocabulary with images and concepts in text. Beginning-level students use pictorial models and cognates, while intermediate students rely on explicitly taught vocabulary. High-intermediate students respond orally or in writing using key vocabulary with increasing accuracy, and advanced students demonstrate comprehension of both familiar and unfamiliar concepts using academic vocabulary with minimal scaffolding.

In the "Teacher Toolbox" within each grade-level scope, the "Multilingual Learners" tab provides general information on "Language Acquisition Progression" to support teacher understanding. Below this section, a list of "Resources and Tools" outlines where integrated Language Supports appear throughout the scopes. A key resource is the "Proficiency Levels by Domain" chart, which describes what beginner, intermediate, and advanced students can do with proper scaffolding. Additional tools include a "Sentence Stems" file for supporting academic conversations (i.e., explaining, agreeing, clarifying, etc.) and a description of "Integrated Accessibility Features," such as audio support, embedded definitions, note-taking tools, and text highlighting. Other highlighted supports include "Language Connections," "Virtual Manipulatives," "Virtual Learning Videos," "My Math Thoughts/Math Story," "Problem-Based Tasks," and Structured Conversation routines.

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 to the program because it is not designed to be adaptive.

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

The materials provide resources for educators and guidance to use within the program. For example, within the "Linguistic Diversity" section of the "Teacher Toolbox," there is a document titled "Proficiency Levels by Domain." The materials state that "[t]eachers can use this tool to help identify a student's English proficiency level by analyzing how students are able to interpret and produce language." The document provides identifiers for different levels of language acquisition. For example, a student at the beginning stage might demonstrate the following characteristics for reading: "When implementing proper scaffolding, students at a beginner level can understand texts structured around a subject, such as related words, repeated words, repeated phrases, repetitive language patterns, and related images."

In the "Teacher Toolbox" within each grade level's scopes, the "Multilingual Learners" tab provides generalized information on Language Acquisition Progression for teacher background knowledge. Below the Language Acquisition Progression is a list of Resources and Tools that shows where the integrated resources can be found within the scopes. The first section provides a chart for "Proficiency Levels by Domain." The chart provides examples of what beginner, intermediate, and advanced students are able to do when given proper scaffolding. Within this section, there is a file for "Sentence Stems" that provides sentence stems for explaining, agreeing, disagreeing, clarifying, and adding on (e.g., "I can visualize this problem by . . ." and "My answer is reasonable because . . ."). The document points out the Integrated Accessibility Features by stating, "Across the curriculum, we have embedded tools that allow students to listen to the text being read, find the definition of words at the moment, make notes, and highlight words and phrases." The other highlighted areas include Language Connections, Virtual Manipulatives, Virtual

Learning Videos, My Math Thoughts/Math Story, Problem-Based Tasks/Mathematical Modeling Tasks, and Structured Conversation routines.

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 provide regular opportunities for oral discourse, with each scope incorporating structured routines to support academic vocabulary development. In Scope 2.9ABCDE, students are introduced to vocabulary through a guided slideshow. Teachers read the words and definitions with students, discuss unfamiliar terms, and prompt conversation using questions such as the following: "How can you connect this word to your work in the Explore?" "How would you rephrase the definition in your own words?" "What do you picture in your mind when you hear this word?" Explore lessons also include explicit crosslinguistic support for Spanish- and Portuguese-speaking students. For example, teachers are encouraged to connect English vocabulary, such as *centimeters* and *estimate*, to their cognates, such as *centímetros* and *estimar*, to reinforce understanding. Additional opportunities for academic discourse are built into "Math Chats" and collaborative activities. In Explore 3, teacher guidance includes questions designed to deepen understanding of measurement concepts, such as asking what unit of measurement is most appropriate, how to align the units, and whether gaps can be left between units. To support structured partner conversations, educators are provided with sentence stems followed by prompts for partners to confirm and clarify each other's responses: "How did you measure the toy with inch tiles or centimeter cubes?" and "I measured the toy by . . ." These supports help students, including EB students, engage in meaningful oral discussions while reinforcing mathematical thinking.

The materials include embedded guidance for teachers to support EB students in developing academic vocabulary, increasing comprehension, building background knowledge, and making crosslinguistic connections through oral and written discourse. In the "Data Analysis" unit, the Hook activity “Animals at the Park” encourages teachers to allow students to ask clarifying questions and share their thoughts and experiences. Sample prompts include the following: "Can you recall a time when you had to do a science project?" "Is there a park near your home or school?" "What animals do you see there?" "What information do we know?" "What information do we need to find out?" In the "Post-Explore" section, students are guided to collect their own data and present it in a graph of their choice, then write questions their classmates can answer using the data. In "Explore 3, Organize Data Using Pictographs and Bar Graphs with Intervals of More Than One," the language supports recommend inviting students to present one of their graphs to the class and explain the steps they took to create it. These activities offer multiple opportunities for students to use academic language in both oral and written formats, promoting meaningful engagement with content.

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.

In the "Money" scope under "Explore 1, Value of a Collection of Coins," students engage in an activity where they evaluate the cost of each topping using the "Hamburger Topping Money Cards." Students complete a table by drawing a pictorial model of the coin showing the cost of each topping, skip counting to find the total value of the group of coins, and writing the total cost of each topping in two ways. The lesson includes an Exit Ticket where students count the total value of the coins, label the count under each coin, and write the total value in two ways.

Scope 1.7E includes opportunities for students to practice telling time to the hour and half hour using analog and digital clocks. In Explore 1, students review time using hour-hand clocks. In Explore 2, students use analog clocks with hour and minute hands to tell time to the hour and half hour. In Explore 3, students use analog and digital clocks to tell time to the hour and half hour. Students practice matching analog and digital clocks in a game of go fish. The materials include an Exit Ticket that assesses time using an hour-hand clock, an analog clock, and a digital clock. The Skills Assessment assesses time to the hour and half hour using analog and digital clocks.

In Scope 2.2EF, Explore 1 students practice plotting numbers on an open number line using benchmark numbers as anchor points. The Math Chat includes DOK-3 questions such as the following: "What strategies did you use as you placed numbers on an open number line?" Explore 2 addresses plotting missing points on a number line. The Math Chat includes questions such as the following: "What strategies did you use as you inserted specific numbers on a number line?" The materials include an interactive game where students practice identifying numbers on a number line and a partner activity of plotting numbers on a number line. The Skills Quiz and "Standards-Based Assessment" assess students' abilities to identify and plot points on a number line.

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.

In Scope 2.9ABCDE, Explore 1, students measure lengths using concrete objects, such as centimeter cubes, inch tiles, one-foot paper strips, and one-yard paper strips. The Math Chat questions span from DOK-1 to DOK-3 and include questions such as the following: "How can you use what you know about measuring one item to help you measure another item?" During Explore 2, students use the inverse relationships of measuring using the real-life example of measuring feet to purchase the correct shoe size. The Math Chat uses DOK-2 to DOK-4 questions to facilitate student conversation. In Explore 3, students measure distances starting at numbers other than zero on the number line. The Math Chat structures conversations with questions such as "what are the differences between using centimeter cubes to measure length and finding distance on a number line?" During Explore 4, students measure length using formal measuring tools to the nearest whole unit using rulers, metersticks, yardsticks, and measuring tapes. Students engage in solving word problems about length in Explore 5. The materials provide extension activities within the scope, which include students measuring the lengths of objects in the classroom using measuring tools.

The "Acceleration" section within each scope provides extension and enrichment opportunities. Acceleration activities in Scope 2.9ABCDE increase in rigor and complexity. Students engage in an activity called "Math Today—The XLine Zipline," where they watch a video about the world's largest zipline and answer related questions such as "How many more feet of cable need to be repaired?" Within each Explore section, the materials provide extension questions. For example, in Explore 3, the extension activity prompts students to use the "Number Line Virtual Manipulative" or "Blank Number Line" in the Daily Numeracy concept to practice finding the distance on the number line.

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 provide a horizontal layout that builds on previous scopes within the grade level. For example, the first scope is 2.2AB, 2.7A, "Represent Numbers to 1,200." In this scope, students "[u]se concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones." This lays a foundation for place value. From there, the materials provide a path to representing numbers on a number line, comparing numbers, and representing fractions. The fifth scope is Scope 2.4AB, "Add and Subtract Two-Digit Numbers." In this scope, students are expected to "[a]dd up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations." This scope requires the skills taught in prior scopes, and it helps lay a foundation for the upcoming Scope 2.6AB, "Multiply and Divide."

The materials provide a Course Rationale describing the connection between scopes within the grade 2 curriculum. For example, the Grade 2 Course Rationale states, "Each scope in grade 2 *STEMscopes Texas 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. This structured approach prepares students not only for future mathematical challenges but also for applying their knowledge to real-world situations."

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 provide a vertical alignment overview within each scope. For example, in Scope 2.8BD, the "Coming Attractions" section within "Content Support" provides the following vertical alignment overview: "Students continue to build on this concept as they extend their understanding of three-dimensional solids. In third grade, students classify and sort three-dimensional figures, including cones, cylinders, spheres, triangular and rectangular prisms, and cubes. This classification and sorting are based on attributes, with students employing formal geometric language. In fifth grade, students apply what they know to find the volume of cubes and rectangular prisms."

The materials provide vertical alignment through the use of big ideas. For example, Scope 2.5AB introduces counting collections of coins up to $1. This scope utilizes skills from the kindergarten Scope K.4A, "Money," as students must identify the name of the coin. Grade 1 Scope 1.4ABC is utilized, as it sets the foundation of counting groups of pennies, nickels, and/or dimes. Scopes 1.2BC, 1.3A, and 1.5ABC address skip counting by twos, fives, and tens. In Scope 2.5AB, students are asked, "How are you ordering your coins to make skip counting easier?" and "Count the coins in the following question, and write their combined value by using the cent sign and the dollar sign."

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 prompts to connect concepts across lessons. For example, in Scope 2.6AB, students are introduced to multiplication and division. Explore 1 introduces multiplication and equal groups, and Explore 2 begins by posing questions, including "What do you recall about multiplication and equal groups?" In Part II of Explore 2, students revisit division. Students are given the question, "What do you recall from separating snacks into equal groups that could help you separate into rows today?" This question helps to connect this learning to prior lessons.

Embedded teacher support states, "Third graders determine the total number of objects when equally sized groups of objects are combined or arranged in arrays up to 10 by 10. They learn to represent multiplication facts by using strategies such as repeated addition, skip counting, multiplying on a number line, and creating arrays and area models. In addition, they determine the number of objects in each group when a set of objects is partitioned into equal shares or a set of objects is shared equally. Writing equations for multiplication and division are also introduced. Students are expected to learn their multiplication facts with automaticity up to 10 times 10 and will be expected to be able to recall the related division facts."

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 prompts to connect concepts within the current grade level and future grade levels. For example, in Scope 2.9F, the concept of area is introduced to students. The lesson begins with a series of questions, including "What do you already know about area?" Then, students are given square tiles they have used before and asked to "discuss how they have measured objects before." The lesson concludes with a Math Chat. Within the chat, students are asked questions relating to measuring in prior lessons, such as "How does measuring with square units compare to measuring objects with a ruler or meterstick?" The "Coming Attractions" section of "Content Support" states, "In third grade, students find the area of rectangles by multiplying the number of rows times the number of unit squares in each row. They decompose figures formed by rectangles to find the area of the entire composite figure."

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.

Each scope provides a Spiraled Review opportunity that revisits skills from prior scopes. For example, in Scope 2.8ACDE, "Two-Dimensional Shapes," the Spiraled Review offers questions that address counting coins; place value with standard, word, and expanded forms; comparing numbers; and addition. For example, Question 1 asks, "To join the student council, each student has to pay dues of $1. Circle the coins needed to join the club."

The materials provide a daily review of addition and subtraction skills. For example, in Scope 2.9F, "Area," the Suggested Scope Calendar lists a daily warm-up of "Fact Fluency: Addition and Subtraction." The skills provide students with games and problem scenarios to solve using addition and subtraction strategies.

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

The materials provide interleaved practice opportunities for students to practice skills and concepts. For example, in Scope 2.2EF, numbers are plotted on number lines using place value to determine their order. In Scope 2.2CD, 2.7B, number lines are used as a tool to compare numbers. For example, a question from the Math Chat in Explore 2 asks, "How did plotting the numbers on the number line help you compare the numbers?"

The materials provide interleaved practice opportunities for students to practice skills and concepts. For example, Scope 2.5AB introduces counting collections of coins up to $1. This scope utilizes skills from the kindergarten Scope K.4A, "Money," as students must identify the name of the coin. Grade 1 Scope 1.4ABC is utilized, as it lays the foundation of counting groups of pennies, nickels, and/or dimes. Skills from grade 2 Scope 2.4AB are utilized as well. Scope 2.2AB, 2.7B, "Represent Numbers to 1,200," states that "[s]tudents count a collection within 1,000 by grouping objects into hundreds, tens, and ones," and they will use those skills to count collections of coins.

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 provide opportunities for students to interpret, analyze, and evaluate mathematical models. For example, in Scope 2.3ABCD, the "Fluency Builder" matching game engages students in identifying and evaluating pictorial models by matching examples and nonexamples of fractions. The activity "Match a Fraction Example with a Nonexample" prompts students to reflect on their thinking. At the end of the game, students record two of their matches on the "Student Recording Sheet" and explain why the cards are a match. They are then encouraged to share their reasoning with a partner.

The materials provide questions that encourage students to interpret, analyze, and evaluate mathematical models. For example, the Math Chat in grade 2 Scope "Three-Dimensional Solids in Explore 3" provides the following questions: "DOK-3 What similarities and differences did you list when comparing the solids? DOK-2 What do you notice about the bases and faces of each prism? DOK-1 How many edges does each prism have? Choose a Structured Conversation routine to facilitate the following question: DOK-3 Which doorstop do you think would work the best? Why?"

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

The materials provide students with the opportunity to create concrete and pictorial models of mathematical situations. For example, in Scope 2.4AB, students use manipulatives, models, pictorial representations, and written equations to add and subtract. The materials state, “They can use the 'Place Value Chart' to help them organize their counting into tens and ones and then find the total of each group."

Give each student a Student Journal and ask them to write the total number of each type of vegetable found in the basket.

In the grade 2 Scope "Multiply and Divide, Explore 1: Model and Describe Multiplication," students use task cards to explore multiplication through real-world scenarios involving bagging groceries. They are

given six cups and two-color counters, with the instruction that the cups represent grocery bags. Students use the counters to distribute a given number into the cups and model the situation. In the corresponding Exit Ticket, students model stocking four rows of fruit snacks with four boxes each, using color counters to represent the problem. They then draw their model and complete the following sentence: “___ rows with ___ in each row equals ___.” This activity reinforces understanding of equal groups and repeated addition as a foundation for multiplication.

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

In Scope 2.4CD, Explore 1 and Explore 2, students review strategies for solving addition and subtraction problems using standard algorithms. In Explore 4, they deepen their understanding by generating word problems that correspond to given number sentences and evaluating the accuracy of their stories. The materials guide teachers to have students select a card with a number sentence, record it in their Student Journal, and independently write a matching story problem. Students then solve the problem using their chosen strategies and explain how they determined the missing number.

The materials provide opportunities for students to apply their conceptual understanding to solve new problems and transfer knowledge to different contexts. For example, the lesson in Explore 1 presents the following problem: "Brett earned 236 tickets. His best friend gave him 112 more tickets. How many tickets does Brett have now?" In Explore 3 and Explore 4, students use their knowledge of adding and subtracting in one-step word problems to solve multistep addition and subtraction word problems. Students answer questions, such as the following, to apply their new knowledge: "There are people in the wave pool. When the waves begin, 112 people get into the pool. Then, 32 more people get into the pool. Now there are 345 people in the pool. How many people were in the pool before the waves began?"

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 tasks designed to build automaticity with grade-level math skills. For example, in the unit "Represent Numbers to 1,200," the Fluency Builder "Even or Odd" has students draw cards to count objects, identify even or odd, and create models. The Spiraled Review "Zoo Field Trip" reinforces key content by having students represent numbers in standard form, pictorial models, and expanded form.

In the grade 2 Scope "Add and Subtract Two-Digit Numbers," in the "Elaborate" tab, teachers receive three Fluency Builders. Students play a matching game, a game of go fish, and a board game, where they practice mental math addition of two-digit numbers using estimation. The materials include a sequential order of teaching the facts for automaticity and fluency, where students can engage in fluency and automaticity practice with virtual manipulatives.

Students are able to increase their fluency and automaticity of addition facts by using an online assessment. For example, in the category "Making Ten," students are given 25 online questions, such as "__ = 5 + 5," "2 + 8 = __," or "4 + 6 = __." Students are provided with immediate feedback on whether their answers are correct by receiving a red or green dot after answering each math equation. After answering the set of questions, students receive a final percentage grade.

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

The materials provide efficient, flexible, and accurate mathematical procedures throughout learning pathways. For example, students explore addition and subtraction by composing and decomposing numbers first. Students use manipulatives, pictorial models, and equations to represent ways to compose and decompose numbers. Later, students apply this knowledge to solve addition and subtraction problems using manipulatives, pictorial models, and equations. For example, in Scope 2.4AB, students solve addition and subtraction problems. The scope begins with adding and subtracting with place value and number lines, then it moves to adding multiple two-digit numbers using students' choice of strategies. The teacher guidance prompts teachers to ask, "What strategy did your group use to find

the sum? Can you think of a different strategy from the one you used that could still give you the same answer?"

The materials provide efficient, flexible, and accurate mathematical procedures throughout learning pathways. For example, in Scope 2.4AB, students solve addition and subtraction problems with pictorial models, number lines, and properties of operations. Later, students use the same model to add three-digit numbers. For example, in Scope 2.4CD, students expand their knowledge of addition and subtraction strategies. The scope incorporates prior knowledge and strategies by asking students, "What addition or subtraction strategies do you already know that can help you today?" At the end of the scope, students reflect on their learning by discussing the question, "When you are solving a problem, what strategy seems to help you?"

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 provide opportunities for students to evaluate the efficiency, flexibility, and accuracy of mathematical representations throughout learning pathways. For example, in Scope 2.4AB, students are encouraged to use multiple strategies to solve addition and subtraction problems. The scope introduces students to strategies such as adding and subtracting with place value, mental math, and number lines. At the end of the scope, students are encouraged to solve addition and subtraction problems with multiple terms, and the materials provide teacher guidance to help students reflect and evaluate models and strategies using questions such as "Can you think of a different strategy from the one you used that could still give you the same answer?"

The materials provide opportunities for students to evaluate the efficiency, flexibility, and accuracy of mathematical representations throughout learning pathways. For example, in Scopes 2.4C and 2.7C, students are encouraged to use strategies of their own choosing to solve multistep addition and subtraction problems. Students use concrete models and pictorial representations to solve addition and subtraction problems. During Explore 1, the teacher guides students using the following guidance: "After drawing their pictorial models, have students write a number sentence to solve the problem. Monitor and check for understanding with guiding questions such as: 'What blocks did you use to build your model? How did you decide whether to add or subtract? What helped you choose which numbers to build? How did you solve the problem? Can you think of a different strategy you could have used?' Encourage students to explain their thinking and consider alternative methods."

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

The materials provide teacher guidance to help students select increasingly efficient approaches to solving math problems. For example, Scope 2.4AB reviews addition and subtraction with a variety of

increasingly efficient strategies. In Explore 5, the teacher guidance states, "Instruct students to find the total value of each Gem Bag. They use their Gem Cost Evaluation Sheets to write a number sentence and show a strategy for how to find the Gem Bag's total on their Student Journals. Strategies should use mental math. For students who need more support or as a way to check their work, encourage them to use their base ten blocks to help them solve."

The materials provide teacher guidance to help students select increasingly efficient approaches to solving math problems. For example, Scopes 2.4C and 2.7C address addition and subtraction word problems. In Explore 4, teachers are prompted to give each student a Student Journal and have them record either a pictorial model or a number sentence for each ride. Students work in groups to solve the problems. Teachers use guiding questions, such as the following, to check understanding: "How did you decide which strategy to use when given only a number sentence?" Then, they encourage students to explain their reasoning and strategy choice.

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 explain how concepts are addressed both conceptually and procedurally. For example, in the "Content Support" section of Scopes 2.2AB and 2.7A, the conceptual and procedural processes of representing numbers in different ways are discussed. The "Content Support" section states, "Using models to compose and decompose numbers up to 1,200 acts as a foundation for representing numbers in standard and expanded form. Base ten blocks are manipulatives that serve this purpose." Students are directed to use base ten blocks to represent numbers in different ways, including various combinations of thousands, hundreds, tens, and ones. The rationale of the procedural understanding is addressed as follows: "As students build quantities, they make connections to the words used for place value. In the number 782, there are seven hundreds, eight tens, and two ones. By addressing the name of each place value, we are assisting students in acquiring the language of mathematics (how to write and speak numbers)."

The materials explain how concepts are addressed both conceptually and procedurally. For example, in Scope 2.6AB, Explore 1, the conceptual process of multiplication to 20 is taught using manipulatives and pictorial models. The educator guidance instructs students to read and discuss the details of the problem from the "Equal Group Task Card." Students use the counters and small plastic cups to create a concrete model of each problem. After building concrete models, students move to the procedural representation of writing an equation. The lesson guidance provides step-by-step instructions: "Distribute the Student Journal to each student, and ask students to record a pictorial model of each problem in the designated box. Encourage students to write a number sentence and fill in the blanks to explain their model. Be sure to relate the model and the number sentence to the context of the problem."

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 concrete objects, pictorial models, and abstract strategies throughout the scopes. For example, in Scope 2.4AB, students add and subtract two-digit numbers. In Explore 1, students use concrete objects to represent addition and subtraction problems. The teacher's guidance states, "Instruct students to count the linking cubes in the baskets. Remind them that the market sells vegetables in groups of 10 or individually. Students should count groups of tens and

ones of both types of vegetables in the baskets. They can use the Place Value Chart to help them organize their counting into tens and ones and then find the total of each group." Students use the Student Journal to determine the number of vegetables purchased, estimate the sum, draw a pictorial model, write a number sentence, and explain the strategy used to solve the problem.

The materials include opportunities for students to use concrete objects, pictorial models, and abstract strategies throughout the scopes. For example, in Scopes 2.4C and 2.7C, students use different strategies to add and subtract within 20. In the Skills Quiz, students use algorithms to solve equations with missing terms, use pictorial models to write equations, and have the option to use concrete manipulatives to help solve addition and subtraction problems. For example, the Procedures and Facilitation Points state, "Allow students to use manipulatives by request." Question 1 asks, "William had 235 baseball cards. His grandpa gave him 125 more for his birthday. How many baseball cards does William have now? Use base 10 blocks to help you show your work." Question 5 states, "Smith Elementary second graders collected canned goods for 3 days. They collected 120 cans on Monday, 236 cans on Tuesday, and some more on Wednesday. In total, they collected 572 cans." Instruction transitions from a pictorial representation to an abstract model as students complete a diagram and solve the problem with an equation.

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 provide opportunities for students to connect concrete and pictorial models to abstract concepts. For example, in Scopes 2.2AB and 2.7A, the materials include a game for students to match a pictorial representation of a number and the standard or written form. The materials also include an interactive game where students build a number from so many thousands, hundreds, tens, and ones. For example, the instructions for the game state, "At the end of the game, have each player choose one match from the game to complete the Student Recording Sheet. Have students explain why the 2 cards are a match. Encourage students to share their responses with their groups."

The materials offer opportunities for students to create concrete and pictorial models. For example, in Scope 2.3ABCD, students represent fractions. They begin by building fractions with concrete objects, then move on to create pictorial models. In Explore, the teacher guidance states, "Instruct students to read the instructions on the Student Journal to find out how they will be cutting each sheet of construction paper. Explain that they will be cutting each sheet into either halves, fourths, or eighths. Remind students that the pieces they cut must be equal in size. Suggest folding the paper first to see if all group members agree on the partitioning before cutting the paper."

The guidance for the Student Journal states, "Fold and cut each colored piece of fabric into equal parts. Draw lines on the rectangle to show your equal parts. Label each equal part as either one-half, one-fourth, or one-eighth."

The materials provide opportunities for students to discuss the relationships between concepts. For example, in Scope 2.6AB, the materials provide question stems for teachers to help students make connections. The guidance states, "Allow students time to turn and talk with a partner from a different group to compare strategies. When students explain their process to the class, help scribe their strategies or models to encourage a discussion about the relationships between strategies."

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 offer opportunities for students to use manipulatives and visual supports within lessons. For example, in Scope 2.9F, students practice finding the area of rectangles using square tiles. The materials guide students to cover rectangles with tiles, ensuring no gaps or overlaps, and encourage them to compare this activity to previous experiences measuring length with tiles. Students then record the area in their Student Journals and rotate through stations to repeat the process. Language Supports are included, such as sentence frames to aid peer interactions: "I counted . . . square tiles in each row. There were . . . rows with . . . square tiles in each row."

The materials also support the development of academic mathematical language through visuals, manipulatives, and language development strategies. For example, in the unit "Numbers on a Number Line—Explore 2: Points on a Number Line," students use printed number lines placed around the classroom. The Procedures and Facilitation Points guide teachers to use number lines with missing numbers and have students work in pairs to determine the missing values. Teachers prompt students with questions, such as "What is the distance between the numbers on the number line? Is it the same between each mark?" and "Is there a familiar measurement tool that helps you understand how number lines work? How does it help?" Students share strategies with peers during the activity and later reflect on their observations during a Math Chat.

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 embedded educator guidance to scaffold, support, and extend students' use of academic mathematical vocabulary in context when communicating with peers and educators. In the "Money" unit, the "Engage" activity "A Trip to the Farmers Market" includes guidance in the Procedures and Facilitation Points on prompting students to count coins and identify missing information needed to solve the scenario. After the Explore whole-group lesson, teachers revisit the problem and extend

vocabulary use by asking questions, such as "What strategy did you use to count your coins?" and "How do you write the total using a dollar sign and decimal?"

Embedded within the materials is guidance to scaffold, support, and extend students' use of academic mathematical vocabulary in context when communicating with peers and educators. For example, in the unit "Represent Numbers to 1,200," the Student Journal prompts students to answer a reflection question: "Explain how you grouped the jelly beans to make it easier to count them." In the same lesson, the Instructional Supports guide educators to challenge students by having them create their own jars of jelly beans with quantities greater than 1,000 and decompose those numbers in different ways on the back of their Student Journals.

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

The materials include embedded guidance to support the application of appropriate mathematical language and academic vocabulary in discourse. For example, in the unit "Fractions, Explore 3: Number of Parts vs. Size of Each Part," the Procedures and Facilitation Points in Step 6 instruct educators to monitor and check for understanding by asking guiding questions, such as "How many pieces did you cut the pizza into? Why?" (DOK-2), "What fractional part of the pizza will one person from the scenario get?" (DOK-1), and "What do you notice about the size of the pieces as you cut the pizza into more pieces?" (DOK-2).

The materials offer Language Supports for students to use academic vocabulary in context within lessons. For example, in Scope 2.2EF, students work with numbers on a number line and engage in structured discourse during a Math Chat. Sample questions include "What strategies did you use as you placed numbers on an open number line?" and "How did your understanding of place value help you place the numbers correctly on the number line?" Students are encouraged to explain their reasoning by considering number relationships, distance, and relative position. The materials also include scaffolded support to guide student conversations. For instance, teachers are provided with sentence structures, such as the following: "I placed . . . close to . . . because . . . ," "I placed ___ between ___ and ___ because . . . ," and "The distance between . . . and . . . is . . ." This embedded guidance supports students in applying appropriate mathematical language and academic vocabulary in their discussions.

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

The materials provide prompts and guidance for educators to facilitate math conversations. For example, in Scope 2.4CD, students engage in a Math Chat to discuss solving addition and subtraction equations using the part-part-whole model. One question asks, "What do you notice about the strategies we used to solve each problem?" Responses may include "We all used different strategies but got the same answers." Another question asks, "When solving a problem, what strategy seems to help you?" Answers

may include "Subtracting by place value—hundreds, then tens, then ones—was easier." Additional Language Supports encourage students to share answers aloud with a partner, receive feedback, and then write and revise their responses in the Student Journal.

The materials include embedded guidance to facilitate mathematical conversations, helping students hear, refine, and use math language with peers. For example, in the unit "Add and Subtract Two-Digit Numbers," the Procedures and Facilitation Points in Step 8 instruct educators to ask students to share their strategies, encourage questioning among peers, and notice similarities and differences in the subtraction strategies using number lines.

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 to anticipate a variety of student answers with exemplar responses. For example, in Scope 2.11ABCDEF, where students identify producers and consumers, sample responses address questions like "How are you a producer or consumer?" and "What is a product you could produce?" The materials also provide embedded guidance to support or redirect inaccurate student responses. In Scope 2.2CD, common misconceptions are identified, such as students confusing inequality symbols, misapplying place value when comparing numbers, and incorrectly adding 10 or 100 when finding numbers more or less than a given value.

The materials include embedded guidance to anticipate a variety of student answers, including exemplar responses, and strategies to support or redirect inaccurate responses. For example, in the "Compare Numbers to 20" unit, the "Engage" section "Laser Tag Scores" provides questions and sample answers, such as "Can you create a larger number than 617 while keeping a 6 in the hundreds place?" with a model response such as "Yes, by switching the 7 to the tens place and the 1 to the ones place because 671 is greater than 617." Another example asks, "How did you rearrange the digits to find the last two possible scores greater than 617?" and provides an explanation of moving digits to different places to form larger numbers.

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 integrate the TEKS mathematical process standards within each scope. For example, in Scopes 2.2CD and 2.7B, students develop skills in comparing and ordering numbers while addressing standards 2.1B and 2.1D. Standard 2.1B is met in Explore 2 through a real-life scenario involving finding prices at an electronics store. Students record their work in Student Journals, build numbers for discounted and competitor prices, and justify their answers by identifying patterns and explaining how they determined prices using place-value concepts. Standard 2.1D is addressed in the Math Chat, where teachers ask questions such as how digits change when adding or subtracting in specific place values, how to determine if a number is greater or less than, and what happens when regrouping is needed. Students use tools like base ten blocks and pictorial models to explain their strategies, fostering communication of mathematical ideas using multiple representations.

The materials appropriately integrate the TEKS process standards in the "Two-Dimensional Shapes" unit. For example, Standard 2.1A is addressed as students sort, classify, create, compose, and decompose shapes through real-life scenarios, like visiting the zoo or decorating a make-believe town. Standard 2.1B is met by using sorts, manipulatives, and task cards for planning, testing, and justifying solutions through Math Chat discussions. Standard 2.1C involves selecting tools, such as real objects, crafting materials, journals, and virtual manipulatives, to explore shape attributes. Standard 2.1D is supported as students communicate their reasoning using models, drawings, and descriptive language. Standards 2.1E and 2.1F focus on creating representations and analyzing relationships to connect mathematical ideas. Finally, 2.1G encourages students to display, explain, and justify their work using precise mathematical language with sentence stems or frames.

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

The materials include a description of how the process standards are incorporated and connected throughout the learning pathways. Each unit's "Home" section features "Content Support" and a section titled "Applying Mathematical Process Standards," which outlines how teachers can engage students in problem-solving, communication, reasoning, and representation. For example, Standard 2.1B is addressed in the "Addition and Subtraction Problem-Solving" unit. In the Engage–Hook lesson "Roll and Score Game Scores," students are asked to represent and solve a subtraction problem where the

unknown may be any term. Teacher guidance instructs educators to read a scenario, prompting students to analyze the given information, identify what else is needed, and determine a solution. After solving, students participate in a group discussion to reflect on the strategies and information used, demonstrating each step of the problem-solving model.

The materials provide an overview of the TEKS and corresponding process standards within each scope. In Scope 2.10ABCD, TEKS 2.10D focuses on drawing conclusions and making predictions from graphs. This is supported by Process Standard 2.1D, which emphasizes communicating mathematical ideas using multiple representations. In the Intervention lessons, students apply these standards using real-life data. For example, in Part I, students organize favorite pet data into a pictograph using a blank graph and dry-erase marker. Teachers prompt discussion with questions like "What pet did most people choose?" and "How do you know?" In Part II, students convert the same data into a bar graph. They label intervals and categories and discuss elements such as the title, axes, and scale. These tasks help students understand graph construction and interpretation while using concrete tools and clear mathematical language.

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

In grade 3 Scope "Addition and Subtraction Problem Solving," "Content Support" provides all of the mathematical process standards to be included in this scope, with an example of what that would look like in this scope. For example, in 3.1A, which states, "[a]pply mathematics to problems arising in everyday life, society, and the workplace," students apply addition and subtraction models to everyday life in multiple ways, such as ordering T-shirts for a fun run, hosting a family playday, and completing challenging missions.

The materials include an overview of the TEKS process standards embedded in each lesson. For example, in the unit "Compare and Order Numbers," Explore 2 lists the following standards: applying math to real-world problems (A), selecting appropriate tools and techniques (C), communicating ideas using various representations (D), organizing and recording ideas with models (E), and justifying reasoning using precise mathematical language (G).

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 provide students with multiple opportunities to apply mathematical thinking and make sense of mathematics through productive struggle. In Scope 2.4AB "Add and Subtract Two-Digit Numbers," students represent addition and subtraction problems using pictorial models and number sentences. The materials support perseverance through problem-solving with teacher guidance. For example, students complete task cards in their Student Journals by drawing models, writing number sentences, and explaining how their models relate to the context of each problem. Teachers are prompted to encourage connections between the visual and numerical representations. Students are also given opportunities to explore and justify multiple strategies. In the Math Chat, students compare approaches with peers through structured partner discussions. As students share their thinking with the class, the teacher helps scribe their models, facilitating a discussion about the relationships among strategies. These instructional components foster conceptual understanding by supporting student reasoning, communication, and flexibility in problem-solving.

The materials provide opportunities for students to think mathematically, persevere through problem-solving, and make sense of mathematics. In the "Numbers on a Number Line" unit, the Engage–Hook lesson titled "Recording Pages Read" guides teachers to present a real-world scenario and pose a problem for students to solve following the Hook and Explore lessons. Students are asked, "What information do we need to find out?" Then, they engage in partner discussions to explore solution strategies. As the problem is revisited, students explain where to place numbers on an open number line and justify their reasoning, promoting sense-making and problem-solving skills. This task encourages students to think mathematically as they connect contextual information to numerical representation. Additionally, in an activity involving a bar or picture graph (e.g., "Piano?"), students demonstrate understanding by interpreting data and justifying their answers. At the conclusion, students work collaboratively to revisit and correct misconceptions from earlier responses, reinforcing perseverance through shared problem-solving and deepening their mathematical understanding.

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

The materials support students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks. For example, in Unit 2.2EF, "Numbers on a Number Line," within the Small-Group Intervention section, the Procedures and Facilitation Points for "Part I: Open Number Lines" provide targeted support to encourage flexible thinking. In Step 7, students are asked, "Which benchmark should it be placed closest to? Why?" These questions help them understand that there is more than one valid approach when placing numbers on a number line. In Step 8, educators facilitate discussions about similarities and incorrect placements, prompting students to explain their reasoning and recognize that tasks can be completed in different, yet still meaningful, ways. In Step 9, the question "What strategies did you use as you placed numbers on an open number line?" encourages students to justify their individual approaches. These instructional steps promote student reasoning, strategy sharing, and justification, reinforcing that multiple solution paths are valid in mathematical problem-solving.

The materials support students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks. For example, in the "Explore 1: Value of a Collection of Coins" lesson of the "Money" unit, the Procedures and Facilitation Points guide teachers to prompt students to share their problem-solving strategies, make connections between different approaches, and discuss the similarities and differences between the processes. This encourages students to explore different solution paths and consider multiple valid strategies, reinforcing the idea that there is more than one way to approach and solve a mathematical task.

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 offer multiple opportunities for students to demonstrate their understanding of mathematics through reading, writing, and discussion. In Scope 2.10ABCD, "Data Analysis," students analyze data with peer collaboration and educator support. The lesson begins with a scenario to engage students and connect prior learning, transitioning from a pictograph to creating a bar graph using the same data. Teachers guide students with questions to help them recall their data collection process and understand the differences and similarities between graph types. Students then work with partners to create bar graphs, using their pictographs as a reference. Teachers monitor progress and use targeted questions to check for understanding and support reasoning. To conclude the lesson, students reflect in their Student Journals by comparing the two graph types and participate in a Math Chat to discuss their strategies and learning. These activities integrate reading, writing, and verbal explanation to deepen mathematical understanding.

The materials provide opportunities for collaborative problem-solving and deepening number sense. In the Scope "Compare and Order Numbers," Explore 2, students work in groups to calculate discounted and competitor prices. After determining these amounts, they record their findings in their Student Journals and respond to questions about number comparisons and place-value changes when adding or subtracting 10 or 100. This activity supports understanding of place-value concepts and reinforces reasoning through group work and reflection.

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 educator guidance to support students in explaining their thinking and generating and justifying mathematical arguments. For example, in Scopes 2.4C and 2.7C, students solve addition and subtraction problems. During the Math Chat, students explain their thinking by answering questions, such as "How did you use your pictorial model and number sentence to help you choose the diagram and number line that best described each problem?" A student might respond, "I looked at the numbers and operations I used in my pictorial model to help me choose the best diagram and number line model." Students then justify their reasoning through teacher-guided discussion, with questions like "Why do you think there were different representations that worked better for certain kinds of problems?" and "What is wrong with the other models?" Students might reply, "The other models have the numbers in the wrong places or use the wrong operation."

The materials provide educator guidance to facilitate student reflection. For example, in Scope 2.2EF, "Numbers on a Number Line," students plot numbers on a number line. Educators guide reflection through structured writing prompts in Student Journals, such as "Explain what strategies you used as you inserted specific numbers on a number line." During the lesson and the Math Chat, educators also facilitate reflection and guide students to justify their thinking through questions like "Is there a familiar measurement tool that you have used that can help you better understand number lines and how they work? How does it help you?" and "How do you know what numbers should be on a number line when they are not marked on the number line?"

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

The materials provide guidance to support educators in offering explanatory feedback based on student responses and anticipated misconceptions. Each scope includes a "Misconceptions and Obstacles" section within the "Content Support" document. For example, in Unit 2.9F, "Area," common misconceptions include using rectangular instead of square units, spreading units with gaps, or measuring only one dimension. Instructional Supports in Explore 1 advise teachers to have students lay out square tiles in equal rows and count each tile to determine the area accurately.

In Scopes 2.2AB and 2.7A, "Represent Numbers to 1,200," the materials note that students may not recognize zero as a number or placeholder. Instructional Supports in Explore 4 recommend prompting students to draw blanks representing each digit before writing a number in expanded form (e.g., __ + __ + __ = 958), reinforcing structure and place-value understanding.

In the "Compare Numbers on a Number Line" unit, materials include anticipated misconceptions and sample student answers. In the Small Group Intervention lesson, educators are prompted to ask students to justify number card placements and respond with guiding questions, such as the following, if misconceptions arise: "Which benchmark should it be placed closest to?" This structured questioning supports deeper reasoning and the correction of misunderstandings.