Zearn

Supplemental English Mathematics, K
Zearn Math for Texas, Kindergarten

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Supplemental	**9798888683873**	**Both Print and Digital**	**Adaptive**

Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	121	3	Flags Addressed	Not Applicable	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	19 out of 21	90%
2. Progress Monitoring	15 out of 19	79%
3. Supports for All Learners	33 out of 37	89%
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	9	0	0
2. Alignment with Public Education's Constitutional Goal	0	0	0
3. Parental Rights and Responsibilities	4	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	Materials do not include diagnostic assessments with an accompanying TEKS correlation guide, and recommended skill entry points.	0/2
1.1d	All criteria for guidance met.	2/2
1.1e	All criteria for guidance met.	2/2
—	**TOTAL**	12/14

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 kindergarten "Course Guide" provides detailed alignment tables showing how the Texas Essential Knowledge and Skills (TEKS) and English Language Proficiency Standards (ELPS) standards are addressed across specific missions and lessons, with examples like TEKS K.2A and ELPS K.1A mapped to multiple lessons within different missions.

A comprehensive "Scope and Sequence" chart and a "Progression of Mathematical Concepts" visually illustrate the intentional vertical alignment of mathematical topics from kindergarten through grade 5, using color coding to clarify concept development across grade levels. The "Progression of Mathematical Concepts" section offers a rationale for the learning paths across grade levels, emphasizing that this purposeful progression ensures meaningful connections and continuity across grade levels, enabling students to build a deep, lasting mathematical understanding.

The "Rationale for Mission Sequence" in kindergarten explains the planned order of missions and lessons, highlighting how foundational skills in number sense, operations, geometry, measurement, and financial literacy are strategically built to ensure coherence, conceptual understanding, and alignment with the TEKS expectations for ongoing math success.

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 kindergarten "Course Guide" provides clear guidance on implementing *Zearn Math* through a balanced approach that integrates Independent Digital Lessons with targeted small-group instruction. This structure is supported by consistent routines, real-time data, and flexible teacher resources designed to foster a structured and engaging classroom environment.

Materials emphasize differentiated instruction by offering just-in-time scaffolds, built-in feedback, and flexible teaching strategies. Both digital and small-group components are designed to meet students where they are, with accessible pathways to grade-level content and adaptable instruction based on student needs.

Teachers are equipped with tools like "Individual Student Reports," "Tower Alerts," and "Sprint Alerts" to monitor student performance and adjust instruction accordingly. These features support timely interventions, enrichment opportunities, and personalized lesson assignments, enabling responsive and targeted teaching.

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

While TEKS-aligned lesson mapping is provided in both the kindergarten "Course Guide" and "Mission Overviews," the materials do not include a diagnostic assessment, or a correlation guide that recommends instructional entry points based on student performance data.

Although the program offers adaptive digital lessons and real-time data to identify student learning needs, it lacks explicit guidance for using diagnostic results to determine initial placement or to tailor instructional starting points.

The materials provide a "TEKS Correlation Guide" that identifies where each standard is addressed within specific lessons and missions, supporting alignment with grade-level instruction.

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

Each kindergarten Mission includes a detailed "Mission Overview" that breaks down the unit by topic, highlights connections to prior learning, and outlines the conceptual progression of mathematical ideas. This helps educators build a strong understanding of the unit's goals and the foundational knowledge students need to succeed.

Every lesson follows a predictable routine—Fluency Warm-Up, Concept Exploration, Independent Practice, and Wrap-Up (including Lesson Synthesis and Exit Ticket)—enabling teachers to effectively plan, anticipate student thinking, and differentiate instruction based on real-time student responses.

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

Zearn Math provides administrators with a variety of reporting tools, including "Admin Reports" that offer real-time insights into implementation and student progress at the school, grade, and classroom levels. The "School Goals Report" tracks metrics such as teacher log-ins, student engagement, lesson completion, digital usage, and "Tower Alerts," enabling leaders to celebrate achievements and identify areas for targeted support.

Resources such as the "Classroom Walk-Through Guide" and "District and School Lead Playbooks" equip leaders with practical tools to monitor instruction, set expectations, and foster meaningful conversations with educators. These tools include "look fors" during classroom visits, helping leaders support strong and consistent implementation.

The "District and School Lead Playbooks" offer step-by-step guidance on preparing, launching, and sustaining *Zearn Math*. They include checklists, training videos, communication templates, and scheduling aids—empowering leaders to build effective support systems, promote teacher and student success, and continuously refine implementation across school years.

1.2 Lesson-Level Design

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

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

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

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.

The materials include comprehensive "Mission Overviews" that outline key concepts and learning progressions aligned to the TEKS. Each mission clearly defines objectives that build foundational understanding and prepare students for future mathematical concepts.

Suggested time frames for each component of the teacher-led lesson materials are found in the "Course Guide.' This is designed to help teachers plan and pace small-group instruction more efficiently and implement lessons with confidence.

Each mission includes assessment keys that identify the specific TEKS standards addressed and where they appear in the lesson sequence. The assessments also feature a table outlining the ELPS objectives, with each rubric row aligned to specific ELPS goals. This comprehensive approach enables educators to evaluate how student responses demonstrate progress in both content mastery and language development.

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

The materials provide "Family Materials" for each Mission in both English and Spanish, offering overviews of the unit and its topics, along with explanations of key terms and models students will encounter.

"Family Materials" include sample problems and practical ideas—such as games, questions, and everyday activities—that families can use to support their child's math learning at home.

A Zearn "Parent Letter" is available in English, Spanish, and eight additional languages. It introduces families to the program, provides a QR code for access, and shares tips for supporting student learning outside the classroom.

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	Materials do not include printable versions of digital assessments, nor do they include the enabling or disabling of text-to-speech features, content and language supports, or calculators.	Not Scored
2.1d	Materials do not include diagnostic assessments prior to instruction that provide detailed information about a student's current knowledge.	0/4
2.1e	All criteria for guidance met.	4/4
—	**TOTAL**	8/12

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

The materials define and explain the intended purpose of various instructional assessments across lesson and mission levels. These include "Lesson Checkpoints"—low-stakes, formative assessments embedded in digital lessons that provide immediate, scaffolded support—and the "Tower of Power," a scaffolded, mastery-based assessment that ensures students have internalized key concepts before progressing in their digital sequence.

At the Mission level, materials offer two types of assessments: the "Mission-Level Assessment," which utilizes open-ended tasks to evaluate conceptual understanding, reasoning, and problem-solving skills; and "Selected Response Practice," which replicates STAAR item formats to help students become familiar with standardized assessment structures. Both assessments are supported by rubrics and answer keys to inform instruction.

The "Course Guide" and teacher-facing materials define each assessment type and describe how they support instructional decision-making. Together, these assessments offer a comprehensive view of student learning, helping teachers plan small-group instruction, support unfinished learning, and ensure students stay on track with grade-level proficiency.

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

Materials include detailed teacher guidance to support consistent and accurate administration of "mission-level assessments." Scripts are provided with specific language for teachers to use, along with

instructions for translating for emergent bilingual students, managing student unresponsiveness, and taking detailed observation notes to capture student understanding.

Clear procedures are outlined for scoring and interpreting student responses, including directions on how to adjust scoring based on the level of support provided during the assessment. For example, if a student requires significant prompting, the materials instruct teachers to lower the demonstrated level of understanding, ensuring results reflect independent performance.

Assessment materials, such as answer keys and teacher guides, support consistent administration practices by including preparation steps, timing suggestions, and examples of expected student behavior. These tools support consistent administration practices, enabling teachers to gather reliable data to inform instruction.

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 do not include printable versions of digital lesson assessments, which may limit accessibility options for some students. Only "Mid-Mission and End-of-Mission" assessments are available in printable format.

Digital assessments include on-screen read-aloud capability, where students can click an audio icon to hear text read aloud. However, there is no feature for educators to enable or disable this support for individual students, limiting the ability to personalize accommodations based on specific student needs.

The materials do not include a built-in calculator feature, nor do they offer options for educators to customize (enable/disable) content and language supports. This limits teachers' ability to tailor digital assessments to support students' specific needs.

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

Materials do not include formal diagnostic assessments prior to instruction that would provide detailed information about a student's current knowledge, skills, strengths, and learning needs. The "Tower of Power"—a scaffolded, mastery-based assessment—is found at the end of each digital lesson; it includes two to four stages that increase in complexity and decrease in scaffolding, ensuring students grasp key concepts before progressing.

Materials include TEKS-aligned tasks and questions, with teacher-facing assessment keys that specify which standards are addressed in each item. In addition to digital assessments, teachers can administer middle-of-unit and end-of-unit paper-based assessments to further monitor student progress and mastery of content.

Assessments feature interactive item types with varying complexity levels, including multiple choice, text entry, drag-and-drop, open numeric entry, and the use of digital manipulatives. These formats offer diverse ways for students to demonstrate understanding and help teachers gather detailed diagnostic information.

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

Assessments feature interactive item types with varying complexity levels, including multiple choice, text entry, drag-and-drop, open numeric entry, and the use of digital manipulatives. These formats offer diverse ways for students to demonstrate understanding and help teachers gather detailed diagnostic information.

The materials offer a range of formative assessments aligned to the TEKS, including digital lesson checkpoints, scaffolded "Towers of Power," exit tickets, "Mission-Level Assessments," and selected-response practice. A TEKS alignment chart is included to help teachers connect assessment items to standards within each mission.

Formative assessments vary in complexity and structure, such as the "Tower of Power," which features two to four progressively challenging stages with decreasing scaffolding. These assessments allow teachers to monitor understanding at multiple levels of cognitive demand and provide real-time feedback and support when students struggle.

2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	All criteria for guidance met.	3/3
2.2b	All criteria for guidance met.	1/1
2.2c	All criteria for guidance met.	2/2
2.2d	This guidance is not applicable to the program.	N/A
2.2e	All criteria for guidance met.	1/1
—	**TOTAL**	7/7

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

The materials provide rationales for correct answers in all Selected Response Practice. For example, in Mission 1, Question 1 informs teachers of the problem type and details students' understanding by selecting the correct answer.

The materials provide rationales for each incorrect response as well. For example, in Mission 1, the key clarifies why an answer is incorrect and what misconceptions may be reflected in each incorrect response. This provides an opportunity for teachers to better understand where students are in their learning.

The instructional materials include scoring rubrics and answer keys for mid- and end-of-mission assessments, offering clear guidance to help teachers interpret student performance across multiple scoring levels. These rubrics outline expected behaviors at each level of mastery—from minimal understanding to fully accurate and independent responses.

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

The instructional materials include multiple reports and tools—such as the Tower Alerts Report and Progress Reports—that help teachers identify where students are repeatedly struggling. Teachers have the ability to assign lessons given the alerts regarding challenging topics. These tools provide specific follow-up recommendations, enabling teachers to assign targeted small-group lessons and foundational content based on individual student needs.

The "Course Guide" and educator dashboard support real-time instructional adjustments by offering visualizations of class- and student-level data. Teachers are guided to use this information to address unfinished learning, reinforce grade-level concepts, and support student progress through small-group instruction and differentiated tasks.

Foundational Guidance aligned to each topic further assists teachers in selecting appropriate lessons when students show signs of difficulty. Additionally, Sprint Alerts and Tower Alerts identify fluency- and content-based struggles, allowing educators to tailor interventions and monitor trends in student understanding over time.

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

The materials include a "Student Progress Tool" that allows students to reflect on their own learning and monitor their progress. It also provides teachers with the opportunity to guide conversations with students regarding their strengths, areas for development, and strategies for growth.

The instructional materials do offer various tools for tracking student progress, including Pace Reports, Progress Reports, Tower and Sprint Alerts, and Student Reports. These resources allow teachers to monitor lesson completion, identify areas of struggle or success, and assign targeted interventions based on individual student needs.

Students also have access to tracking tools such as the Weekly Goal Tracker, Challenge Tracker, and "digital badges," which promote accountability and motivation by visually representing lesson completion and goal achievement. The "Brainy Challenge" further supports goal-setting and family engagement.

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.

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

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

The digital lessons incorporate multiple checkpoints throughout each lesson to ensure continuous monitoring of student understanding. These frequent checks help identify misconceptions early and provide opportunities for immediate feedback and correction.

When students encounter challenges, the digital platform offers immediate, integrated support features such as dividing problems into smaller steps, providing digital manipulatives, and delivering targeted guidance. This scaffolded support enables students to progress at their own pace and develop confidence as they work toward independent mastery.

Each lesson concludes with a "Tower of Power" assessment, a scaffolded, mastery-based task that gradually increases in difficulty while providing decreasing levels of support as students advance. This

structure, combined with resources such as "Math Chats," and interactive videos, enables students to learn at their own pace and receive targeted assistance when necessary.

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	Materials do not provide explicit educator guidance for enrichment and extension activities tailored to students who demonstrate proficiency in above grade-level content and skills.	1/2
3.1d	Materials do not provide an option for educators to enable or disable accommodations for individual students, such as text-to-speech features, content and language supports, or calculators.	0/3
3.1e	All criteria for guidance met.	2/2
—	**TOTAL**	8/12

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.

Materials include explicit educator guidance for scaffolding during small-group instruction, particularly in Concept Exploration and Fluency Practice, where teachers address misconceptions, provide hands-on modeling, and give immediate feedback. These lessons are designed to strengthen conceptual understanding while allowing students to continue progressing through digital lessons, ensuring that instructional support is responsive to individual learning needs.

The digital components of the program adapt in real time based on student performance, offering step-by-step guidance, targeted hints, video tutorials, and scaffolded support. Features such as "Math Chats," "Learning Labs," and "Z-Squad" incorporate pauses in instruction to assess students' understanding of prerequisite or grade-level concepts. Based on student responses, the program adapts its instructional approach by reviewing, scaffolding, or progressing to the next skill, as appropriate.

Fluency activities involve providing support to students when they encounter challenges. As students engage with the program, assistance is offered as needed through opportunities to retry tasks, provide counting support, and ask guiding questions. These activities aim to strengthen foundational skills, build connections between concepts, reinforce prior learning, and address any unfinished areas of understanding.

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 do include explicit educator guidance for pre-teaching academic vocabulary before lessons, and there is strong guidance for reinforcing vocabulary during instruction.

Materials include embedded language supports within the "Mission Overviews" to promote the development of academic vocabulary. For example, in the Mission 4 Overview, the "Terminology" section highlights English-Spanish cognates—such as *addition (adición)*, *equals (igual)*, *minus (menos)*, and *part (parte)*—to help teachers intentionally build connections between the two languages. These supports are designed to ensure that all students, including emergent bilinguals, can access and engage with grade-level mathematical content.

Additionally, supports include explicit vocabulary instruction, where key math terms are introduced and reinforced to build academic language. In the kindergarten "Teacher Lesson Materials," the materials note, "As the vocabulary terms cone, face, cube, corners, and edges come up in the lesson, use gestures to ensure student understanding (i.e., touching your face and the face of the solid while saying the word 'face')."

In various lessons, Multiple Means of Representation introduces the term and encourages teachers to show visuals and refer to them while concepts are being taught.

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 do not include explicit educator guidance for supporting students who demonstrate proficiency in above grade-level content and skills. While the instructional materials reference enrichment opportunities such as "Digital Bonuses," optional practice problems, and discussion prompts, these enrichment activities closely mirror core lesson content (grade-level) and do not extend into more advanced mathematical concepts that require deeper reasoning or critical thinking.

The materials offer suggestions for students who demonstrate proficiency in grade-level content and skills. The "Course Guide" indicates that optional practice problems may be used to extend and flexibly reinforce grade-level learning. These resources support problem solving, conceptual understanding, and connecting mathematical ideas beyond the core digital lesson.

Optional practice problems are a printable set of exercises available for each lesson, designed to support reinforcement or extension of the grade-level lesson content. Educators may choose to incorporate these problems for additional practice or to facilitate discussion and reflection during small-group instruction.

Additionally, small-group lesson materials include margin notes and discussion prompts to encourage deeper thinking and foster mathematical discourse.

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 include accommodations, including text-to-speech, content and language supports, and calculators that educators can enable or disable to support individual students. In kindergarten lessons, prompts are automatically presented with audio support, and text-to-speech functionality is accessible to all students. Additionally, instructional prompts and directions can be replayed using embedded audio buttons.

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 "Teacher Lesson Materials" include educator guidance on offering options and supports for students to demonstrate their understanding of mathematical concepts in various ways. For example, in Lesson 24 under "Multiple Means of Action and Expression," the materials note that, "some students may benefit from using manipulatives to create a house instead of drawing," illustrating how students can perform, express, and represent their understanding through concrete models rather than abstract representations.

The "Teacher Lesson Materials" also provides options to support students in demonstrating understanding through varied approaches. For example, students may use manipulatives like attribute blocks before drawing, or work with a partner to sort data before graphing. The materials emphasize an intentional balance between whole-group and independent practice, ensuring all students have multiple opportunities to represent, engage with, and express their mathematical thinking.

Lessons encourage student discourse and reflection, allowing learners to analyze similarities and differences in problem-solving methods. Teacher prompts and structured discussions support students in articulating their thinking, with additional guidance for emergent bilingual students through sentence stems and visuals to aid communication.

3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	All criteria for guidance met.	5/5
3.2b	This guidance is not applicable to the program.	N/A
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**	12/12

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.

Materials include explicit prompts and guidance to help educators build mathematical knowledge. In Mission 4, Lesson 18, teacher notes explain that "students are moving toward a more abstract understanding of the relationships between numbers to 5," supported by the Sprint format, which promotes pattern recognition through repeated practice with combinations that make 5. Teachers are also prompted to "briefly recall previous Sprint preparation activities" to activate prior knowledge and connect to familiar routines.

In Mission 5, Lesson 4, teacher notes emphasize that students decompose teen numbers, such as 17, into 10 and 7 rather than adding to find a total. This supports conceptual understanding of part-whole relationships and reinforces the idea that teen numbers are "ten ones and some more ones." Teachers are guided to prompt students to represent 17 = 10 + 7 visually to deepen understanding.

In Mission 5, Lesson 10, the "Fluency Practice" includes guidance for using multiple means of representation to teach teen numbers. A teacher note suggests relating the group of 10 on the Rekenrek to students' fingers to help internalize base-ten structure. The combination of visual and physical representations reinforces conceptual understanding.

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

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

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 a range of intervention tools, including foundational lessons to address unfinished learning, small-group lessons for reteaching or extending grade-level concepts, and fluency materials, including "Sprint Alerts," to build automaticity with foundational skills. Instruction is delivered through diverse structures such as whole-group, small-group, and individualized digital work, allowing for flexible, responsive intervention.

Teachers are guided to use real-time digital lesson data, such as "Tower Alert Reports," to identify student needs and determine when to intervene. These data-driven insights support just-in-time instructional decisions, including forming small-groups and delivering scaffolded instruction based on student progress and performance.

The materials provide clear, embedded guidance for implementing intervention across instructional settings. Each small-group lesson includes structured components like Fluency Practice, Concept Exploration, Lesson Synthesis, and Exit Tickets, along with prompts and routines (e.g., Turn and Talk, Think-Pair-Share) to support effective delivery and promote student engagement and understanding.

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

Materials include enrichment and extension methods that support various forms of engagement by offering diverse, hands-on learning opportunities, and extension questions to deepen students' critical thinking. For instance, in Mission 3, Lesson 15, students estimate and test how materials in the classroom fit into a container, encouraging exploration and reasoning.

Higher-level thinking is observed in Mission 2, Lesson 1, where students explore shapes using a mystery bag and compare attributes, with prompts designed to extend learning. For students ready for a challenge, "Multiple Means of Engagement" suggests asking open-ended questions like, "What would that shape look like if it was not flat?" or "Can you make a picture of that shape, but make it so that it is sticking up?"—encouraging creative reasoning and spatial thinking.

Materials provide specific activities to deepen student learning. The Mission 5, Lesson 21, warm-up activity includes a specific enrichment suggestion: "Challenge students to double the number of puppies in the cage using two 10-frames to show 10 and some more." This guidance encourages teachers to extend learning by building on core content and engaging students in deeper mathematical thinking.

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

"Teacher Lesson Materials" include prompts to support educators in providing timely feedback during lesson delivery. Throughout "Warm-Ups (Fluency Practices)," "Concept Explorations," and "Exit Tickets," multiple prompts are embedded to help teachers gauge student understanding of the content in real time. This guidance enables educators to adjust instruction promptly and support student learning effectively.

Digital lessons include features that provide students with timely, real-time feedback and adaptive support as they work independently through grade-level content. These lessons are designed to maintain rigor while allowing students to progress at their own pace. When students struggle, the system generates a “Tower Alerts Report” that alerts teachers and recommends specific Foundational Lessons to address gaps in understanding, enabling targeted, just-in-time intervention aligned with core instruction.

The materials include prompts that support educators in providing timely feedback during lesson delivery through strategic questioning. In Mission 4, Lesson 40, teachers are guided to check for understanding as students work on decomposition using cubes. Questions such as "How many more cubes does two need to make 10?" and "How do you know?" encourage students to explain their thinking, allowing teachers to assess understanding and respond with immediate feedback.

3.3 Support for Emergent Bilingual Students

An emergent bilingual student is a student who is in the process of acquiring English and has another language as the primary language. The term emergent bilingual student replaced the term English learner in the Texas Education Code 29, Subchapter B after the September 1, 2021 update. Some instructional materials still use English language learner or English learner and these terms have been retained in direct quotations and titles.

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.3a	This guidance is not applicable to the program.	N/A
3.3b	All criteria for guidance met.	4/4
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.

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

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.

The materials provide embedded linguistic accommodations that address the needs of students at all levels of language proficiency, as outlined by the ELPS. These supports are consistently included in the "Multiple Means" notes and offer strategies, such as sentence frames to guide student responses, explicit modeling of academic vocabulary to build language understanding, and structured oral language routines that promote opportunities for practice and application in meaningful contexts.

The materials include embedded linguistic accommodations for beginning and intermediate Emergent Bilingual (EB) students, as defined by the ELPS, to support their development of academic language. For example, in Mission 2, Lesson 3, the materials suggest using pictures and concrete examples to help students connect to key vocabulary, such as *straight*, *sides*, and *corners*.

In the "Lesson Synthesis" of Mission 1, the materials include embedded linguistic accommodations for varying levels of language proficiency. For example, students are prompted to "turn and talk to your

neighbor," giving them the opportunity to rehearse their thinking with a partner before sharing with the whole class. The guidance also suggests that beginning and intermediate EB students may benefit from strategic pairings that support the use of their native language to encourage idea sharing.

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

The materials include implementation guidance to support educators in effectively using the materials in state approved bilingual/ESL programs. Guidance found in the "Course Guide" outlines how the resource can be flexibly implemented across a variety of models, including dual language, transitional bilingual, ESL pull-out, and ESL content-based. Suggestions for adapting instruction, using digital lessons effectively, and incorporating scaffolds are provided.

While there are resources designed to help teachers preview digital lessons to experience embedded language supports, learn instructional strategies for English Learners—including Spanish translations for K–2—and identify academic language requiring linguistic support, these supports are not linked to state approved bilingual/ESL programs.

Additionally, though there is implementation guidance to support educators in bilingual and ESL settings by including a table that aligns lessons with the ELPS, the ELPS are not included in the "Teacher Lesson Materials," and teachers must consult a separate guide to access the ELPS.

3.3d – Materials include embedded guidance to support emergent bilingual students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through oral and written discourse.

The materials include embedded guidance for supporting EB students in developing academic vocabulary, increasing comprehension, building background knowledge, or making cross-linguistic connections through written discourse. Activities found throughout the "Concept Exploration" prompt students to write about key grade-level concepts—such as describing the attributes of a triangle or comparing solid shapes using sentence frames and modeled responses. Teachers are also prompted to review cognates in Spanish and other languages, and integrate the terms into sentence-writing activities.

The materials include embedded guidance to support EB students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through oral discourse. Small-group instruction incorporates structured routines like "Turn and Talk," "Think-Pair-Share," and sentence frames to encourage students to verbalize their thinking, supporting both mathematical reasoning and language development aligned with ELPS. For example, in Mission 3, Lesson 23, students practice academic vocabulary using choral responses and sentence stems, while in Mission 4, Lesson 37, teachers build background knowledge and cross-linguistic connections by linking English terms with Spanish equivalents and cognates.

Additionally, in Mission 4, Lesson 4, teachers are encouraged to invite beginning and intermediate EB students to draw on their cultural experiences when sharing stories about number bonds. This approach leverages students' prior knowledge to foster participation and language use in the classroom.

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

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

4. Depth and Coherence of Key Concepts

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

4.1 Depth of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.1a	All criteria for guidance met.	2/2
4.1b	All criteria for guidance met.	4/4
—	**TOTAL**	6/6

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

The materials include practice opportunities throughout learning pathways that require students to demonstrate depth of understanding aligned to the TEKS. Each lesson integrates conceptual understanding and procedural fluency while promoting mathematical coherence and embedding all process standards through reasoning, modeling, communication, and problem solving.

Instructional and assessment tasks are aligned to the TEKS and vary in complexity to meet diverse learner needs. Examples include "Mid-Mission and End-of-Mission" assessments that require students to explain their reasoning, model with manipulatives, and solve real-world problems using multiple representations, such as drawings, equations, and number sentences.

Throughout the learning pathways, students demonstrate their understanding through guided practice, open-ended discussions, and math chats. Teacher guidance encourages probing for reasoning and explanation, supported by rubrics that track progress from minimal to solid reasoning, ensuring that assessments measure conceptual understanding aligned with the TEKS.

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

The materials include practice opportunities and scaffolded assessments that build conceptual understanding and align with the TEKS, with tasks that increase in rigor and complexity. Above-grade-level content is integrated into both digital core lessons and optional supports, such as Digital Bonuses and teacher-guided extensions. For example, in the Digital Bonus for Mission 5, Lesson 18, students apply place value understanding to distinguish between visual representations of numbers greater than 30—extending their kindergarten work with K–2C into grade 1 expectations.

The materials include practice opportunities and scaffolded assessments that build conceptual understanding and align with the TEKS, with tasks that increase in rigor and complexity. For example, "Mission 5" supports understanding of teen numbers through decomposition, while the "Tower of Power" gradually reduces support to help students demonstrate proficiency.

Optional resources like "Digital Bonuses" and extra practice problems that align with the TEKS and provide additional opportunities for students meeting grade-level expectations to deepen engagement. These resources reinforce current TEKS and support future learning by strengthening conceptual understanding and procedural fluency within the kindergarten mission sequence.

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 instructional materials demonstrate coherence within each grade level by connecting concepts across missions and lessons. "Mission Overviews" consistently explain how each mission builds on prior knowledge and prepares students for future learning, such as progressing from number composition in Mission 4 to working with teen numbers in Mission 5.

Mission and lesson overviews emphasize conceptual progression across content areas like number sense and geometry. For example, students move from understanding simple number relationships to decomposing teen numbers and from identifying basic shapes to classifying two- and three-dimensional figures based on their attributes.

Teachers are supported with scripted lesson notes that highlight these connections and provide instructional insights. These notes guide teachers in reinforcing prior knowledge and preparing students for upcoming content, ensuring lessons build meaningfully on one another to support a coherent learning experience.

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 demonstrate clear connections from kindergarten through grade 6 by intentionally building patterns, big ideas, and relationships across grade levels. The "Scope and Sequence" outlines how core concepts are introduced, extended, and deepened through a coherent K–8 learning progression. Examples of coherence include place value, multiplication/division, and fractions—each developed systematically across multiple grades.

Specific examples, such as the use of number bonds in kindergarten through grade 2 and the development of place value understanding through the "Say Ten" method, illustrate how key concepts evolve across grade levels. Overviews within missions explicitly identify how current lessons prepare students for more advanced work in future grades.

This progression is outlined in overarching documents and reinforced within individual lessons, where prior knowledge is routinely activated and new concepts are presented as part of a continuous mathematical journey. The instructional materials extend patterns of thinking, strengthen connections among concepts, and equip students for success in future grade-level learning.

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 demonstrate coherence across lessons by consistently building on students' prior knowledge to support current learning and prepare for future grade-level content. Concepts such as decomposing teen numbers into 10 ones and some ones and using the "Say Ten" method help students develop a foundational understanding of place value that supports later mathematical learning.

"Mission Overviews" and "Teacher Lesson Materials" explicitly connect early number sense skills—like counting, composing, and decomposing numbers—to the development of operations and equations. Tools such as number bonds and manipulatives bridge concrete and abstract representations, reinforcing part–part–whole relationships and supporting readiness for addition and subtraction.

Teachers are supported through scripted lesson notes and visual progressions that show how kindergarten content connects to grade 1 and beyond. These resources clarify how early mathematical experiences prepare students for more advanced concepts, ensuring coherence within and across grade levels.

4.3 Coherence and Variety of Practice

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

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

The materials provide consistent opportunities for spaced retrieval by incorporating fluency practice that revisits previously learned skills at the start of each lesson. These warm-ups reinforce foundational concepts such as number sense, counting, and part–whole relationships, helping students retain and strengthen prior knowledge.

Adaptive activities like those found in the "Number Gym"—such as "Make and Break," "Number Bond Dash," and "Tell the Hidden Number"—are designed to reinforce learning from earlier missions while preparing students for upcoming content. These activities connect new and prior concepts through concrete, pictorial, and symbolic representations.

Teacher guidance and lesson overviews emphasize how fluency practice builds coherence over time. By repeatedly engaging with earlier skills such as decompositions, number bonds, and counting strategies, students deepen their understanding and are better equipped for more advanced mathematical learning.

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

The materials offer interleaved practice by encouraging students to apply previously learned skills and concepts in new contexts. For example, in Mission 4, students use addition strategies learned earlier, such as number bonds, cubes, and drawings, to solve problems and explain their reasoning.

Missions build on earlier content to deepen understanding, such as Mission 6 extending students' knowledge of two- and three-dimensional shapes from Mission 2, while also integrating skills from measurement, number, and operations in engaging activities like the "Math Olympics."

Fluency practices and lesson tasks regularly revisit foundational skills like counting, number recognition, and composition/decomposition across multiple missions, allowing students to reinforce and integrate their learning through varied methods and problem-solving scenarios.

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.

Questions and tasks provide opportunities for students to interpret, analyze, and evaluate models and representations for mathematical concepts and situations. In kindergarten Mission 5, Lesson 21, students use two-color beans, number bonds, and equations to explore teen number decompositions. They interpret quantities, analyze different visual and symbolic models, and evaluate which representation best shows their thinking.

In multiple lessons across kindergarten, students are prompted to analyze and compare visual representations—such as number bonds, object groupings, and graphs—and explain their reasoning. For example, in Mission 1, Lesson 11, students create and compare a real-object graph and a picture graph, identifying similarities and differences with teacher-facilitated discussion and support.

The materials also engage students in evaluating shape models and combinations through hands-on activities. In Mission 6, Topic A, students construct shapes with straws and clay and investigate how changing side lengths affects the shape, encouraging critical thinking and reflection. Similar evaluation tasks appear in other lessons where students justify shape classifications or analyze number combinations to form number bonds.

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

Questions and tasks provide opportunities for students to create concrete models to represent mathematical situations. For example, in kindergarten Mission 4, Lesson 2, students use linking cubes and number bond templates to act out stories and physically model part–whole relationships, reinforcing their understanding through hands-on exploration.

The materials include tasks that prompt students to draw pictures and diagrams to represent mathematical ideas. In kindergarten Mission 5, Lesson 8, students create and compare number bonds of

13 and draw matching visuals to explain their thinking, supporting conceptual understanding through pictorial modeling.

Lessons combine both concrete and pictorial modeling, giving students multiple ways to represent math. Activities such as acting out number bonds with hula hoops or constructing shapes with straws help bridge abstract math concepts with tangible, meaningful experiences.

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

Questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts. For example, kindergarten students use physical objects and work mats to repeatedly build and count groups of ten, then apply this understanding to represent 12 as ten buttons and two eyes on a gingerbread man, reinforcing place value concepts through contextualized modeling.

Students apply knowledge of measurement concepts such as taller and shorter by using gestures, classroom objects, and drawings to compare height. They extend their understanding by comparing their own drawings with peers and justifying comparisons, applying mathematical vocabulary in real-life scenarios.

The materials prompt students to use number bonds and drawings to solve story problems, identify unknowns, and connect mathematical representations with real-world examples. Digital and print tasks also encourage students to reflect on the relevance of math concepts like part-whole relationships, one more/less, and shape attributes beyond the classroom.

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 provide tasks designed to build student automaticity and fluency through daily, embedded fluency practice. For example, digital lessons begin with a fluency warm-up, such as "Number Train" or "5-Frame Peek-a-Boo," which helps students build number recognition and subitizing skills. These repetitive, fast-paced tasks strengthen foundational fluency required for success in grade-level math.

Lessons include adaptive fluency activities like "Number Gym" and lesson-aligned sprints, such as "Make and Break" or "Number Bond Dash," tailored to reinforce prior learning and prepare students for upcoming content. Real-time feedback and visual supports keep students engaged while targeting unfinished learning. This structure ensures fluency is built through consistent, individualized practice that connects directly to core lesson content.

Teacher-led small-group fluency lessons include activities like dot card counting and comparing linking cube towers. These tasks use prompts and visual cues to help students recognize quantities quickly and reason about number relationships. Through guided questioning and practice, students develop the automaticity needed to efficiently complete grade-level mathematical tasks.

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

The materials provide opportunities for students to practice efficient, flexible, and accurate mathematical procedures through sequenced tasks that build conceptual understanding. For example, in Mission 5, students develop strategies for counting "10 and some more" using objects, ten-frames, and drawings, which support procedural fluency in place value. As they move through digital lessons and receive immediate feedback in Tower of Power, students refine their accuracy and efficiency.

Lessons offer multiple pathways for solving problems, encouraging students to apply and compare different strategies. In Mission 5, Lesson 21, students show teen numbers using number bonds, drawings, "hide zero cards," and Rekenreks, then discuss which strategy worked best. This promotes flexibility in mathematical thinking and supports the development of efficient and accurate problem-solving approaches.

The materials incorporate visual models and hands-on tools to help students internalize mathematical procedures. For instance, number bonds and dot images are used in Missions 4 and 5 to support composing and decomposing numbers. These consistent visual representations foster accuracy, deepen understanding, and allow students to apply math concepts in varied contexts.

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

Materials provide opportunities for students to evaluate mathematical representations, models, and strategies by comparing their approaches with peers. For example, in Mission 5, Lesson 5, students solve a word problem and then compare drawings with a partner, discussing similarities and differences and representing their thinking with a number bond. These conversations help students reflect on the efficiency and accuracy of different solution paths.

Throughout learning pathways, lessons include prompts that support students in evaluating their use of mathematical tools. In Mission 5, students explore teen numbers using objects, pictures, ten-frames, and number bonds, then respond to questions such as "Which pictures were the easiest to count?" and "Did your friend circle 10 objects the same way?" These questions guide students to assess the clarity and efficiency of various representations.

In Mission 3, Lesson 9, materials provide opportunities for students to evaluate mathematical strategies and representations by comparing object weights using both direct comparison and balance scales. Students explain how they determined which item is heavier or lighter, supporting the development of flexible thinking. This approach encourages the use of multiple tools and methods, laying the groundwork for strategic problem-solving.

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

In Mission 5, materials guide students to move from counting by ones to recognizing numbers as a group of ten and some more. This shift supports the development of increasingly efficient problem-solving strategies. Students learn to see numbers 11–20 in terms of place value, rather than as individual units.

Lessons include prompts that ask students to explain how they determined which object is heavier or lighter. These questions guide students to reflect on their reasoning and consider alternative methods. This reflection helps build flexibility in thinking and encourages the development of justifications based on observations and tool use.

In Mission 4, Lesson 9 Fluency Practice, materials prompt teachers to guide students in discussing and applying efficient counting strategies. Through structured tasks like grouping and crossing out fish,

students practice decomposing numbers. Teachers are encouraged to pause and ask students to explain how they located groups efficiently.

5.3 Balance of Conceptual Understanding and Procedural Fluency

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

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

The materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed in the Mission 5 "Course Guide." The guide notes that by the end of the mission, students will have gained a robust understanding, such as decomposing teen numbers as 10 ones and some ones, and procedural skills, including written sentences. Students will be well-prepared for future learning in mathematics with a strong foundation in both number sense and real-world application of mathematical concepts.

The materials explicitly state how the procedural emphasis of the TEKS is addressed. In the Mission 4 Overview, students develop procedural fluency by engaging with number sentences and word problems that reinforce composition and decomposition. The materials highlight that by the end of the mission, students will be able to write equations and represent word problems, supporting procedural skill development aligned to the TEKS.

By guiding students through experiences that develop understanding of number composition and decomposition, the materials explicitly express how the conceptual and procedural emphasis of the TEKS are addressed. In Mission 4, Topic A, students engage in concrete and representational activities, such as using number bonds and drawings, to explore and record relationships between quantities. This approach supports both conceptual understanding and procedural skill development aligned to the TEKS.

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

The questions and tasks provide opportunities for students to use concrete models, pictorial representations, and abstract models. In the Mission 4 Overview, students begin by exploring composition and decomposition through real-world examples, like counting birds or fingers. They then represent these relationships using number bonds with pictures and numerals, gradually progressing to drawings and number sentences, allowing them to move flexibly between concrete, pictorial, and abstract representations.

In Mission 4, Lesson 2, the materials provide opportunities for students to use concrete models, pictorial representations, and abstract models as required by the TEKS. The lesson begins with students acting out

a word problem using hula hoops and classmates as a concrete model. Students then draw number bonds and representations on whiteboards and conclude by writing numerals, reinforcing the progression from concrete to pictorial to abstract understanding.

Questions and tasks provide opportunities for students to utilize concrete models, pictorial representations, and abstract models as outlined by the TEKS. In Mission 2, Lesson 1, students initially use pattern blocks to count and discuss quantities as a concrete representation. They then collaborate with a partner to create pictorial illustrations and write equations, supporting a transition from hands-on exploration to abstract reasoning.

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

The materials include structured supports that help students connect, create, define, and explain concrete and representational models to abstract concepts, as required by the TEKS. In Mission 4, Lesson 21, teachers guide students to transition from using linking cubes to model subtraction story problems to writing and reading corresponding number sentences. Through repeated practice and partner discussions, students explicitly link physical tools and visual models to symbolic notation, deepening their understanding.

The materials include supports for students in defining and explaining concrete and representational models to abstract concepts, as required by the TEKS. For example, in Mission 2, students progress from describing and identifying attributes of two- and three-dimensional shapes using concrete models and visuals to defining shapes abstractly based on their attributes. This progression supports deeper conceptual understanding of geometric concepts.

Evidence of support for connecting concrete and representational models to abstract concepts is found in Mission 4, Lesson 34. Students use linking cubes to model subtraction, then draw pictures and write matching number sentences (e.g., 9 – 4 = 5). Teacher prompts and structured questions (e.g., "How would we make a subtraction sentence about what we did?") help students explain their thinking and make explicit connections between physical models, visual representations, and abstract notation, as required by the TEKS.

5.4 Development of Academic Mathematical Language

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

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

The materials provide opportunities for students to develop academic mathematical language using manipulatives and guided teacher questioning. In Mission 2, Lesson 2, students describe two-dimensional shape attributes using mathematical vocabulary such as *sides*, *corners*, and *curves*, while engaging with shape visuals. The teacher reinforces language development by recording and labeling shapes like "triangle" on the board, supporting students in making connections between attributes, terminology, and visual representations.

In Mission 3, Lesson 5, the teacher explicitly models comparative language such as *shorter than* and *longer than*, while students use linking cube sticks to make comparisons. Students then repeat the vocabulary in context, reinforcing understanding through hands-on interaction and structured oral practice.

In Mission 3, Lesson 8, the materials provide opportunities for students to develop academic mathematical language using manipulatives and realia. Students engage in hands-on comparison of classroom objects to explore and use vocabulary such as *heavier* and *lighter*. The teacher prepares a variety of real-world items with contrasting weights to support meaningful language development through observation and discussion.

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. For example, in Mission 1, Lesson 3, the teacher guides students through a matching activity where they describe similarities using precise language and sentence frames. The guidance extends vocabulary use by having students explain how items are used together in complete sentences, with teachers circulating to support correct usage and encourage rich mathematical communication.

In Mission 4, Lesson 14, the materials include embedded educator guidance to scaffold and support students' use of academic mathematical vocabulary in context. During "Concept Exploration," students use linking cubes to model addition stories and are encouraged to use terms like join, the same as, and total when writing equations. The materials guide teachers to circulate and listen for accurate vocabulary and mathematical discussion, supporting vocabulary development through observation and feedback.

The materials include embedded educator guidance to scaffold and support students' use of academic vocabulary in context when communicating with peers and educators. For example, in Mission 3, Lesson 13, students practice using precise language to compare capacity with phrases like more than, less than, and the same, supported by teacher modeling and repetition. Additionally, the materials guide educators to extend vocabulary development through visual supports, linguistic connections, and structured discussions that address student understanding and misconceptions.

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 student application of appropriate mathematical language and academic vocabulary in discourse. For example, in Mission 2, Lesson 6, the guidance recommends facilitating student talk by providing sentence frames such as, "These two solids are the same because they have..." and, "This one rolls, but this one just...," encouraging students to use precise vocabulary and the names of solids. This support promotes clearer communication and deeper engagement with mathematical concepts.

In Mission 7, Lesson 23, students measure and compare lengths using inches, feet, and yards, with teacher guidance to model comparative language through sentence frames such as, "The __ is longer/shorter than the ___ because ___." These sentence starters are posted for student reference to facilitate clear and accurate mathematical communication.

Each lesson includes a "Warm-Up" featuring fluency practice and a word problem that introduces new concepts and reviews prior learning, providing students opportunities to engage in conversations using academic language. For example, in Mission 4, Lesson 3, students use manipulatives and drawings to represent word problems, then discuss their work with a partner. These discussions encourage the use of vocabulary such as *total*, *in all*, *join*, *separate*, and *number bond*, supporting development of mathematical language in context.

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

The materials include guidance to facilitate mathematical conversations. In Mission 3, Lesson 4, teachers are directed to use sentence frames such as "I am taller than ___" and "I am shorter than ___" to support students in comparing objects or people. Students draw examples to match their sentences and share

with partners, asking, "Does he or she agree that it is true?" This process promotes use and refinement of comparative language through peer dialogue and verification.

The materials include embedded guidance to facilitate mathematical conversations, allowing students to hear, refine, and use math language with peers. For example, in Mission 3, Lesson 17, teachers are guided to prompt students to compare sets of linking cubes and discuss their observations with a partner. The materials also instruct teachers to model precise comparative statements such as "more than" or "the same as," and to circulate, supporting students as they practice using accurate mathematical language in context.

In Mission 4, Lesson 1, the teacher introduces number bonds using manipulatives and drawings, modeling the concept while students follow along with their own materials. The lesson includes embedded guidance to facilitate mathematical conversations by having students turn and talk with partners to share put-together or joining stories that correspond to the number bond. By engaging in partner discussions, students hear how others use the language, which helps them compare, adjust, and improve their own mathematical communication.

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 support for redirecting inaccurate student responses. For example, in Mission 1, Lesson 9, "Checkpoint 1 (0:42)," students are asked to count five train cars and select the number 5. If students provide an inaccurate response, a video launches to support students. The on-screen teacher models counting one, two, three, four, five, with highlighting of the cars on the screen to further support the students' developing one-to-one correspondence.

The materials include embedded guidance with exemplar responses but do not anticipate a variety of student answers or provide strategies to redirect inaccurate responses. For example, in Mission 6, Lesson 1, students build shapes using sticks and clay, and teachers are prompted to ask questions that elicit student thinking. The materials include exemplar student responses such as, "I used four sticks. I made a square," and "There are four sides, and they are all the same! It has four corners. It is closed," but the materials do not include teacher guidance for addressing inaccurate responses.

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 process standards appropriately into instruction. According to the "Course Guide," each lesson is intentionally designed to embed the TEKS Mathematical Process Standards (MPS), providing opportunities for reasoning, modeling, communication, and problem-solving (process). These process standards are incorporated throughout lessons to ensure students engage meaningfully with grade-level mathematics.

In the Mission 1 Overview, the materials appropriately integrate the TEKS process standards by addressing standard 1.1F, which focuses on analyzing mathematical relationships to connect and communicate ideas. Students decompose numbers, explore multiple combinations, and apply strategies such as counting on and part–whole relationships (content) to solve addition and subtraction problems. These activities help students make meaningful connections and communicate (process) their mathematical thinking effectively.

TEKS process standards are also integrated in the Mission 3 Overview, where the materials emphasize that students are encouraged to express mathematical ideas (process) using symbols, diagrams, and verbal explanations. For example, when decomposing numbers (content), students write number sentences and articulate their thinking, supporting both conceptual understanding and communication.

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 process standards are incorporated and connected throughout the learning pathways. For example, the Mission 4 Overview explains how Process Standard 1G is integrated by guiding students to display, explain, and justify mathematical ideas using precise language. Students use comparison symbols and vocabulary to express and support their reasoning, both orally and in writing, helping them develop clarity and accuracy in their mathematical communication.

In the Mission 5 Overview, the materials include a description of how process standards are incorporated throughout the learning pathways. The overview explains that students analyze relationships between attributes of shapes, such as the number of sides and corners, to classify shapes accurately. As the mission progresses, students extend this analysis to understanding the structure of clocks and the

relationship between hand positions and time, helping them connect mathematical ideas and deepen their understanding of both geometry and time concepts.

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

The materials include an overview of the TEKS process standards incorporated into each lesson. The Course Guide provides a table that outlines which process standards are addressed in each mission, helping educators understand how these standards are integrated throughout the curriculum.

The materials include an overview of the TEKS process standards incorporated into each mission, as found in the "Mission Overview" documents. For example, Mission 2 highlights focus standards like K.1A, K.1E, and K.1G, with teacher background explaining how students connect geometric concepts to real-world objects.

In the Mission 1 Overview, the materials explain how process standard K.1D is addressed throughout the mission. Students are encouraged to communicate their mathematical ideas, reasoning, and implications using multiple representations, such as symbols, diagrams, and language. For example, when decomposing numbers, students write number sentences and name them, supporting both conceptual and procedural understanding of numbers and operations.

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.

Students are supported in thinking mathematically through tasks that require them to explore mathematical concepts using multiple representations and approaches. For example, in Mission 4, Lesson 4, students use clay and number bonds to represent various ways to decompose 5 bananas, while reflecting on their reasoning with partners. Similarly, in Mission 6, Lesson 3, students use geoboards to create and compare shapes, naming and identifying attributes of polygons, fostering exploration and mathematical thinking.

The materials encourage perseverance through complex, multi-step tasks and open-ended questions that prompt sustained problem solving. In Mission 4, Lessons 25 and 26, students engage in activities that require both visual modeling and strategic reasoning, such as explaining the strategies used to complete number bonds or revisiting tasks to show a different solution path. These opportunities guide students to make sense of mathematical relationships and persist through challenges.

Students are prompted to make sense of mathematics through reflection, justification, and visual pattern recognition. In Mission 4, Lesson 32, students are asked to notice and describe patterns in number decompositions and explain how tools like 5-group drawings help solve problems. Similarly, in Mission 4, Lesson 34, students reflect on how visual aids support their understanding of number bonds and subtraction sentences, reinforcing conceptual understanding and metacognitive thinking.

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

Materials support students in understanding that there can be multiple ways to solve problems and complete tasks by encouraging flexible thinking and exploration. For instance, in Mission 4, Lesson 4, students use clay and drawings to show different ways to share 5 bananas, then compare strategies with a partner. Similarly, in Mission 5, Lesson 20, students draw different ways to divide 9 flowers between two vases, and are prompted to find another possible solution.

Students are supported in explaining their thinking through structured partner conversations and teacher-guided questioning. In Mission 4, Lesson 12, students use 5-group mats and verbal explanations to describe number combinations to 8, while teachers ask follow-up questions to highlight students' reasoning. In Mission 4, Lesson 29, students reflect on how number bonds and strategies helped them create number sentences, reinforcing the idea that equations can be written in different forms.

Materials provide explicit opportunities for students to justify their reasoning and engage in mathematical discourse. In Mission 4, Lesson 25, students explain the strategies they used to complete number bonds and justify the placement of parts and wholes. Similarly, in Mission 3, Lesson 27, lesson synthesis prompts students to compare multiple methods of determining quantity, justify which was easiest, and explain how today's activity connects to real-life problem solving—all fostering justification and critical thinking.

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.

Materials are designed to require students to do math through active exploration and hands-on practice with manipulatives and representations. In Mission 4, Lessons 2 and 3, students create number bonds using objects, shapes, and numbers, engaging in physical modeling to support conceptual understanding. In Mission 5, Lesson 14, students use objects and dot drawings in a partner activity to count and show quantities, reinforcing understanding through kinesthetic engagement.

Students are given regular opportunities to write about math using visual models and number sentences. In Mission 4, Lesson 5, students draw their own number bonds and write number sentences to match, then share with a partner. In Mission 3, Lesson 7, students trace numbers and mathematical representations and include math vocabulary in their oral explanations.

The materials prompt students to discuss math regularly with peers and educators, encouraging reasoning and verbal explanation. In Mission 4, Lessons 3, 29, and 30, teachers guide students with prompts such as, "What happens if we turn the number bond around?" and "Talk about how you knew which number should go where," leading to dialogue about mathematical relationships. Similarly, in Mission 3, Lesson 8, students compare weights of objects with partners and explain their reasoning using comparative language, fostering rich mathematical discussion.

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.

Materials guide educators in prompting students to share and reflect on their problem-solving through explanations. In Mission 4, Lesson 2, students pause to explain efficient ways of locating hidden groups of numbers, which also supports reflection. Similarly, Mission 4, Lesson 5 includes enrichment questions where students explain how they determined where to place totals in number bonds, and in Mission 3, Lesson 27, students compare sets of beans and explain who has more and how they know, helping students articulate their reasoning while reinforcing key concepts.

The materials support educators in eliciting arguments and encouraging students to construct and respond to claims based on their mathematical understanding. In Mission 4, Lesson 8, students correct the teacher's number bond placements, and in Mission 5, Lesson 2, students are asked to justify whether the same strategy can be applied to different problem types. Similarly, in Mission 3, Lesson 4, students compare measurements and use reasoning to agree or disagree with their peers' conclusions.

Educators are equipped with questions and prompts that encourage students to justify their strategies and mathematical decisions. In Mission 4, Lesson 32, students reflect on their choices in decomposing numbers, justifying the remaining part needed after choosing a first part, while in Lesson 35, they justify their subtraction strategies using drawings and equations during class discussions. In Mission 5, Lesson 14, students defend which configurations are easier to count and justify that quantities remain constant when rearranged.

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

Materials offer guidance and prompts for teachers to provide explanatory feedback based on anticipated misconceptions. Notes are embedded directly within the "Concept Exploration" portion of a lesson and labeled "Anticipated Misconceptions." The structure includes: a likely misconception based on student responses, guidance that includes an explanation, and one or more suggested prompts or teacher moves to address the misconception and guide students toward proficiency.

The materials include prompts to support educators in providing explanatory feedback based on student responses. In Mission 4, Lesson 16, teachers are guided to ask follow-up questions such as, "How do you

know?" to encourage students to elaborate on their thinking, revise their representations, and explain changes in their reasoning.

The materials include prompts and guidance that support educators in providing explanatory feedback based on student responses. In Mission 4, Lesson 15, during an activity about decomposing the number 8, the teacher prompts students to generate and share different number sentences based on how rocks or cubes are grouped. The materials guide teachers to build on student responses by encouraging multiple representations (e.g., 8=2+6, 2+6=8), prompting further exploration, and helping clarify the roles of the addends and totals.