

Great Minds PBC

Supplemental English Mathematics, 2

Math Catalyst Texas, Grade 2

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Supplemental	9798894176451	Digital	Static

Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	36	5	Flags Not in Report	Not Applicable	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	21 out of 23	91%
2. Progress Monitoring	18 out of 20	90%
3. Supports for All Learners	29 out of 36	81%
4. Depth and Coherence of Key Concepts	5 out of 16	31%
5. Balance of Conceptual and Procedural Understanding	37 out of 38	97%
6. Productive Struggle	17 out of 19	89%

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 "Alignment Guide" aligns the Texas Essential Knowledge and Skills (TEKS) (the learning path for each concept), connects to the "TEKS Mathematical Process Standards," and organizes the English Language Proficiency Standards (ELPS) into a K–3 grouping.

The *Implementation Guide* identifies "Embedded Supports for Language Proficiency" and specifies the locations of these supports for each proficiency level. For example, in "Early Numeracy: Perceptual Subitizing Within 5," the guide describes how students at the Pre-Production level, in "Concept Mini Lesson Objective 3," circle groups that show a given number of dots. For students at the Beginning level, in "Concept Mini Lesson, Objective 1," the language support note offers guidance on using language as a resource by encouraging students to say numbers in their home languages and then pair them with numbers in English.

The *Strand by Grade Scope and Sequence* states, "*Math Catalyst Texas* provides a mathematical progression of concepts unbound by the constraints of grade-level standards . . . the Concepts and Objectives within each strand build upon each other to form a ladder of mathematical understanding . . . Equipped with student data that can help inform decisions, teachers can move among the Objectives in a strand independent of grade level to find the most useful support for meeting individual students' needs so that they can continue to climb."

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 provide an *Implementation Guide* with usage recommendations and strategies to support effective educator use, including just-in-time supports, advanced learning opportunities, and full-course implementation. The guide defines the program as "a supplemental instructional resource designed to be used with a Multi-Tiered System of Supports (MTSS) . . ." and clarifies its focus on Tier 2 and Tier 3 instruction delivered outside of Tier 1 core instruction. The guide includes visual representations of this definition, the covered concepts, and their vertical and horizontal alignment.

In the "Program Implementation" section, teachers receive practical tools such as "Possible Ways to Use Components" and "Sample Schedules" in 15- and 30-minute formats. To support emergent English bilingual learners, the guide offers strategies for setting up center rotations, accompanied by a sample lesson schedule.

In the "Concept Internalization" section, educators reflect on guiding questions to determine entry points into "Concept Mini Lessons," advance instruction using "Practice and Application," and assess student progress through the "Progress Check."

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

The materials include a "Concept Diagnostic Assessment," available at the start of each "Concept," designed to measure student mastery of the skills in the "Concept." The assessment includes a rubric, and each assessment item is labeled with the correlating TEKS for the objectives assessed. The *Implementation Guide* states that the provided rubric is "to help teachers analyze student responses, determine a student's proficiency level, and identify skill entry points."

The materials include a *Strand by Grade: Scope and Sequence* and an *Implementation Guide* used as a TEKS correlation guide. The *Implementation Guide* directs educators, under "Determining Intervention Needs for Students," to administer a district- or school-selected screening tool and analyze the resulting data to determine next steps. These assessments, combined with the "Concept Diagnostic Assessment," provide data that can be used to inform instruction and provide timely intervention.

The "Concept Diagnostic Assessment" guides educators to specific objectives within the "Concept" of the materials. For example, in the grade 2, "Concept Diagnostic Assessment: Compose, Decompose, and Represent Numbers to 1,200," the materials direct educators to consider several statements when making "instructional decisions about skill entry points based on the data collected from the Concept Diagnostic Assessment," such as "Can the student compose and represent numbers to 1,200 by drawing on a chart?" (Objective 1), "Can the student represent numbers to 1,200 and show the value each digit represents?" (Objective 2), "Can the student represent numbers to 1,200 in standard and expanded

forms?" (Objective 3), and "Can the student represent numbers to 1,200 in word and standard forms?" (Objective 4).

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

The materials include protocols to help teachers internalize units, supported by the *Implementation Guide's* "Concept Internalization" section. Guiding questions help teachers use the three components effectively, such as, "Which objective is a good starting point for small-group instruction?" In grade 2, the "Concept Mini Lessons: Compose, Decompose, and Represent Numbers to 1,200" progresses from composing numbers to 1,200 and representing those numbers using objects and a chart, to representing numbers up to 1,200 in standard and word form.

The "Progress Check" section asks, "What does proficiency look like with the content of this concept?" In grade 2, the "Progress Check: Compose, Decompose, and Represent Numbers to 1,200" helps teachers use data from the "Progress Check Tool" to guide instruction. Questions focus on whether students can compose and represent numbers to 1,200 by drawing on a chart to represent numbers to 1,200 in word and standard forms.

The "Concept Guide" outlines materials, preparation strategies, and how to address misconceptions with step-by-step teacher and student actions. In the grade 2, "Concept Guide: Compose, Decompose, and Represent Numbers to 1,200, Addressing Student Misconceptions," teachers support student understanding by using charts and objects to represent the value of each digit.

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

The materials include an *Implementation Guide* that instructional leaders can use to support effective program implementation. This guide outlines the program's structure, offers suggestions for using each component, and provides a sample schedule. Additionally, the "Concept Guide" lists the teacher and student materials, recommended preparations, and key considerations for instruction.

The materials include a "Concept Internalization" of the *Implementation Guide* to support teachers and instructional leaders in the use of the materials. Each major component of the materials includes questions for educators that can be used by instructional leaders. For example, the "Concept Mini Lessons" section lists questions such as, "Which objective is a good starting point for small-group instruction? What do my students already know? What can they already do? What do they need support with?"

The *Implementation Guide* also includes a "Guidance for Leaders" section that mirrors the guidance in the "Concept Internalization" section. For example, the "Concept Mini Lessons" section lists questions such

as, "How are data analysis and the Progression of Mini Lesson Objectives used to determine the appropriate amount of support that will meet students' needs?"

1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	Materials do not include ELPS in either objectives, or assessments.	5/7
1.2b	This guidance is not applicable to the program.	N/A
1.2c	All criteria for guidance met.	2/2
—	TOTAL	7/9

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 materials do not include ELPS in either the assessment resources or the learning objectives, though lessons incorporate ELPS-aligned tasks involving listening, speaking, reading, and writing. Teachers track progress using tools like the "Observational Data Recording Sheet," and informal notes.

The materials include 10-minute lesson plans with clear objectives, time frames, summaries, differentiation strategies, and progress monitoring tools. Each "Concept Guide" lists required materials, preparation tips, supports for addressing misconceptions, language scaffolds, and "Family Math" pages. For example, grade 1's "Concept Guide: Compare and Order Numbers to 120" includes progress checks, mini lessons, manipulatives, templates, and student pages for Objectives 1–4.

Assessments are directly aligned with the TEKS and increase in complexity across objectives. In grade 2's "Progress Check: Compose, Decompose, and Represent Numbers to 1,200," students move from composing numbers with charts to representing them in word and standard forms. Assessment questions align directly with TEKS 2.2A and 2.2B.

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

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

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

The materials contain support for families in both English and Spanish for each unit for families to use at home to support learning. For example, each concept has a "Family Math" letter for families in both languages.

This letter states the objective, explains the objective, and then provides simple practice for home. The letter presents illustrations, sample questions, and correct student answers.

The "Family Math" letter presents direct support for students at home using academic vocabulary in both languages. For example, in the grade 2, "Concept Guide" for "Compose, Decompose, and Represent Numbers to 1,200," the "Family Math" letter reads, "Your student is working on composing, decomposing, and representing numbers to 1,200. They use place value to identify the value of each digit in a number. They also represent numbers in standard form, word form, and expanded form. You can support your student's progress by asking the questions in the table below as your student learns to represent whole numbers up to 1,200 in different ways." The letter ends with sample questions, correct answers, and illustrations of the objective.

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	This is a static program and does not include digital assessments. Materials do not include digital assessments that 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.	Not Scored
2.1d	All criteria for guidance met.	4/4
2.1e	All criteria for guidance met.	4/4
—	TOTAL	12/12

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

The materials define various instructional assessments and their purposes. The *Implementation Guide* describes "Core Math Assessments" as formative and summative tools for measuring student proficiency in specific skills and concepts, useful for identifying intervention needs. It also presents the "Pause and Monitor Tool" as a way for students to reflect on and track their progress.

According to the *Implementation Guide*, the "Analyze Student Progress" section in "Concept Mini Lessons" includes questions for informally assessing student proficiency on current objectives. It also offers guidance on using the "Observation Data Recording Sheet" to document performance and make instructional notes during any lesson component.

The "Progress Check Tool" serves as both a pre- and post-assessment, with a rubric to evaluate student responses and determine proficiency. Each section explains how to apply the tool to specific objectives. For instance, in grade 2, "Place Value: Compose, Decompose, and Represent Numbers to 1,200," the tool is used to collect proficiency data and is not graded.

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

The "Concept Guide" for each lesson outlines the materials and preparation needed for the "Progress Check" and "Pause and Monitor Tool." For example, the grade 2 guide for "Add Within 100 by Using Mental Strategies" lists teacher and student materials, including linking cubes for ten-sticks and ones.

The materials support consistent assessment through tools like the "Observational Data Recording Sheet," allowing teachers to document performance and adjust instruction. In the grade 2, "Progress Check: Locate Numbers on a Number Line," the tool collects data on student proficiency with multiples of 10 and 100 and is not intended to be graded. Problems are sequenced from simple to complex to show progression.

Each "Progress Check" includes step-by-step guidance with a teacher script, actions, and expected student responses to ensure standardization. For instance, the grade 2, "Locate Numbers on a Number Line" assessment provides an overview, guiding questions, and a "Progression Towards Proficiency Rubric." This structure supports consistent implementation across classrooms.

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 neither include digital assessments, nor do they offer printable versions or accommodations such as text-to-speech, content and language supports, or calculators that educators can enable or disable to support individual students.

Although the *Implementation Guide* describes assessment and data collection through tools like "Analyze Student Progress," the "Observational Data Recording Sheet," and the "Progress Check Tool," there are no digital assessments included in the program. The *Navigation Guide* states, "There are no digital components to this curriculum." Therefore, digital assessments with printable versions or accommodations are not available to educators.

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

The materials include a "Concept Diagnostic Assessment" at the beginning of each "Concept" with TEKS-aligned tasks or questions and interactive item types with varying complexity levels. The *Implementation Guide* states, "The Concept Diagnostic Assessment can be used before or during instruction to collect data about a student's current understanding, skills, strengths, and areas for growth. It enables educators to monitor students' progress, identify learning gaps, and adapt instruction to meet students' needs."

Each "Concept Diagnostic Assessment" includes a rubric that ranks student proficiency from "Not Yet Proficient," "Partially Proficient," and "Proficient" and lists the TEKS for each objective assessed in the "Concept." Tasks and questions within each assessment are sequenced from simple to complex and include various tasks and responses for students to show progression towards mastery. Teachers are directed to end the assessment if the student is unable to answer the first questions and try again after the student receives more instruction.

In the grade 2, "Concept Diagnostic Assessment: Compose, Decompose, and Represent Numbers to 1,200," students represent numbers in increasingly complex ways using drawings, charts, and mathematical symbols.

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

The "Assessment and Data Collection" section on page 7 of the *Implementation Guide* outlines how the program supports ongoing formative assessment. This section details the use of two key tools: the Observational Recording Sheet, and the Progress Check Tool. The "Observational Data Recording Sheet" is designed to help educators capture formative assessment data during daily instruction. The *Implementation Guide* provides guidance on using this sheet to collect evidence of student understanding across various components of the program. Additionally, each concept includes a "Progress Check Tool" that presents problems aligned to the TEKS, sequenced from simple to complex. This design allows educators to evaluate students' grasp of the concept's objectives at increasing levels of depth. The "Using the Progress Check Tool to Inform Instruction" section provides targeted guidance on interpreting student responses and using the data to inform next steps in instruction—an essential feature of high-quality formative assessment.

The materials include an "Analyze Student Progress" section in each "Concept Mini Lesson" with questions for teachers to use to informally monitor students' progress. Questions include "Monitor," which assess students in the moment, and "Questions to Advance Student Thinking," which extends the objectives in the lesson for teachers to informally assess depth of learning.

The *Implementation Guide* identifies the "Observational Data Recording Sheet" as a "versatile tool that can be used to record student performance on each objective within a concept . . . Teachers can use the recording sheet to make notes about students' performance during any component, including written work on Practice pages."

In grade 2, "Place Value," Objective 1 has students use objects and value cards to compose numbers up to 1,200. By Objective 4, students write numbers with and without zeros in word form, based on standard form inputs.

2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	Materials do not include a rationale for correct responses or incorrect responses.	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 do not provide a rationale for correct and incorrect responses.

The materials contain instructional assessments, scoring information, and guidance for interpreting student performance. The materials provide a "Progress Toward Proficiency Rubric," which outlines how to assess students' proficiency levels at the end of each unit's "Progress Check." The rubric guides teachers in rating students as "Not Yet Proficient," "Partially Proficient," or "Proficient," based on descriptors that progress from simple to complex problems. If a student cannot answer the initial, simpler questions, the materials instruct the teacher to "end the assessment and retry after more instruction."

In the "Concept Guide" for each strand, the materials include an "Addressing Student Misconceptions" section listing frequent misconceptions and explicit guidance for teachers on how to address them. The "Analyze Student Progress" section within each "Concept Mini Lesson" gathers data on student performance to determine mastery, including questions to "Monitor" progress, "Advance Student Thinking," and "Plan Future Practice."

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 guidance on using included tasks and activities to respond to student trends in assessment performance. The *Implementation Guide* identifies the "Progress Check" as a tool for collecting data on student proficiency, supported by a rubric that highlights strengths and intervention needs.

The *Implementation Guide* provides direction for using tools like the "Analyze Student Progress" section, "Observational Data Recording Sheet," and "Progress Check Tool" to respond to performance trends.

These tools help track proficiency, record notes during lessons, and analyze student work to determine next steps.

Each "Concept Mini Lesson" includes a "Progression of Mini Lesson Objectives" aligned with the previous "Progress Check," and provides skill-specific guidance. Lessons include scripted support, examples, activities, and differentiation tips. For example, in grade 2, "Place Value: Compose, Decompose, and Represent Numbers to 1,200," teachers are directed to begin with students who can compose and represent numbers to 120 using objects and a place value chart, but need support composing and representing numbers to 1,200 by using objects and a place value chart.

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 tools for teachers to track student progress and growth, as well as tools for students to monitor their own development. One tool is the "Observational Data Recording Sheet," embedded in every concept. This sheet allows teachers to document performance on each objective and make notes during any lesson component, including written practice.

The "Pause and Monitor Tool" supports student self-assessment by prompting reflection on learning and progress. According to the *Implementation Guide*, students use it to write "I can" statements, track skill development, gather evidence, and collaborate on goals.

The "Progress Check Tool" is used as a pre- and post-assessment to evaluate proficiency with skills taught in "Concept Mini Lessons." It includes a rubric to help teachers analyze responses, celebrate progress, and plan for mastery.

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 and guidance to support educators in conducting frequent checks for understanding at key points throughout each lesson or activity. "Teacher Tips" in the "Application" section offer strategies for monitoring progress and differentiating instruction. For example, in grade 2, "Addition: Add Within 1,000 by Using Mental Strategies," a tip suggests facilitating a small-group activity to informally assess understanding and provide support.

Each "Concept Mini Lesson" includes an "Analyze Student Progress" section with targeted questions to help teachers assess understanding. In the grade 2, "Addition: Add Within 1,000 by Using Mental Strategies," lesson, teachers monitor learning by asking if students can represent an addend on an open number line by drawing and labeling a tick mark or if the student can identify the total on the number line.

Scripted questions embedded in each "Concept Mini Lesson" guide teachers in checking for understanding during instruction. For example, in grade 2, "Addition: Add Within 1,000 by Using Mental Strategies," the teacher asks students to determine the number 40 in unit form, solve $38 + 10$ using a number line, and then explain their solution.

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	This is a static product, and materials do not have a digital component. Therefore, they do not include digital materials with accommodations, including text-to-speech, content and language supports, and calculators that educators can enable or disable to support individual students.	Not Scored
3.1e	All criteria for guidance met.	2/2
—	TOTAL	9/9

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 guidance for lessons and activities scaffolded for students who have not yet mastered prerequisite or grade-level concepts and skills. According to the "Determining Intervention Needs for Students" section of the *Implementation Guide*, teachers should collect informal data by asking students to explain their thinking during math instruction. Recording classroom observations and student conversations offers an additional data point when identifying appropriate interventions.

The *Implementation Guide's* "Possible Ways to Use Components" section explains how to incorporate the "Concept Mini Lessons." These mini lessons give explicit guidance and activities for students who have not yet reached proficiency. The materials suggest that teachers review or preview concepts in small groups and embed the appropriate content within lessons to strengthen skills.

Each "Concept Mini Lesson" opens with a "Progression of Mini Lesson Objectives." Under each objective, the materials tell the teacher where to begin based on the student's current proficiency. For instance, in the grade 2 lesson, "Place Value: Compare and Order Numbers to 1,200," Objective 1 advises starting with students who can "compare quantities to 1,200 by using place value and comparative language and can represent numbers to 1,200 by using expanded notation, but need support comparing numbers to 1,200 by using place value and comparative language."

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 explicit educator support for pre-teaching unfamiliar references in text or for developing academic vocabulary. The "Development of Academic Mathematical Language" of the *Implementation Guide* describes the embedded support for teachers to help students understand and use precise mathematical language, such as using manipulatives and visuals, and following the "Language Support" notes in "Concept Mini Lessons" to scaffold vocabulary growth. Further, the materials include "Key Terminology" cards in each "Concept Guide." The cards include "student-friendly definitions and visual representations that provide a flexible opportunity for pre-teaching and reinforcing of academic mathematical language." Each set of cards can be used as flashcards, portable word walls, and sorting activities.

The materials embed support for developing academic vocabulary during instruction. In the lesson "Concept Mini Lessons: Compose, Decompose, and Represent Numbers to 1,200," Objective 1 begins with students creating numbers with money, then creating numbers by using a place value chart and pictorial representations, while the teacher explains, "To write this number, we read the chart from left to right. On the left, there are six hundreds in the hundreds place. Moving to the right, there are zero tens in the tens place and then four ones in the ones place." The teacher then reviews the concepts in the lesson by stating, "We composed numbers and represented them using money, place value cards, and drawing in a chart."

The materials also embed supports for unfamiliar references in text. In the lesson, "Subtraction: Subtract Within 1,000 by Using Mental Strategies," students work on subtraction by taking from a ten or a hundred to subtract. The included "Language Support" contains a short list of sentence frames and states, "Consider using the following sentence frames to support students with language production, terminology, and the take from a ten or the take from a hundred strategies."

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 *Strand by Grade Scope and Sequence* document shows how concepts build across grades, enabling teachers to identify opportunities for extending learning beyond the current grade level. The "Start here if students can . . ." statements in each "Progression of Mini Lesson Objectives" chart allow teachers the opportunity to work with students on above-grade-level skills for enrichment or extension. Teachers then use the "Solve a Task" in the "Application" activities to promote enrichment through open-ended problem-solving and flexible reasoning.

The *Implementation Guide* states the "Practice and Application" sections are to "provide enrichment and extension opportunities." Each "Practice and Application" has a chart with listed activities, the purpose of the activity, and considerations. These considerations make suggestions on how to modify the activities to meet the needs of the student based on proficiency level.

The materials include specific prompts for advanced questioning during discussions. At the end of each objective in the "Concept Mini Lesson," there are "Questions to Advance Student Thinking," for example. In the lesson, "Subtraction: Subtract Within 1,000 by Using Mental Strategies," Objective 3 asks, "What benchmark number is closest to? After you take away the benchmark number, what do you need to do? How can you show your thinking on the open number line?"

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.

Digital materials are not interactive for students; accommodations are not evident in the materials available. These materials are static and do not include accommodations like text-to-speech, content and language supports, or calculators that educators can enable or disable to support students.

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

The materials include a "Read-Draw-Write Tool" for students to use throughout the lesson independently, with a partner, and in stations. The *Implementation Guide* states, "The Read-Draw-Write Tool can support students as they use the Read-Draw-Write process to solve problems." This tool provides visuals, prompts, and questions to remind students how to approach solving a variety of problems.

Section "TEKS Mathematical Process Standards" in the *Implementation Guide* states, "The TEKS Mathematical Process Standards (MPS) are seamlessly woven into different components of the program. Students use objects, drawings, numeric representations, and precise language to communicate mathematical ideas. In the Application section, students select tools and techniques to solve problems, and in Concept Mini Lessons, they analyze relationships to connect prior learning to new concepts."

Each "Concept Mini Lesson" guides teachers in supporting student demonstrations of understanding mathematical concepts. For example, in the lesson, "Place Value: Concept Mini Lessons: Compose, Decompose, and Represent Numbers to 1,200," students use play money, place value charts, representations with digits, number bonds, and addition sentences. At the end of the lesson, students represent numbers in expanded and standard form based on the skills gained from the lesson.

3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	Materials do not 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.	0/5
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	Materials do not include prompts, and guidance to support educators in providing timely feedback during lesson delivery.	0/2
—	TOTAL	7/14

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.

Materials do not 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.

While the materials do offer connections between patterns and big ideas, the materials do not offer prompts and guidance for educators to build knowledge. The connections are embedded on the student side of the materials.

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

The materials offer educator guidance for effective instruction using strategies like "sharing the learning objective with students visually and verbally," which the *Implementation Guide* calls "an essential instructional approach" for supporting students not yet proficient in math. This practice connects new learning to prior knowledge, introduces terminology, and builds student confidence. Additional strategies such as choral reading, partner reading, and visual support enhance understanding.

The *Implementation Guide* outlines how to structure instruction through components like "Possible Ways to Use Components," "Sample Schedules," and "Station Rotations." For example, the "Concept Mini Lessons station" provides small-group instruction, while the "Practice and Application stations" support aligned practice and enrichment. The "Bring Your Own Tech Station" allows students to complete teacher-selected digital activities related to the concept.

Under "Tiered Instructional Recommendations," the guide states, "For supplemental support, instruction can be delivered in a small-group setting," and for intensive support, it "can be individualized, adapted, and delivered in a group size that meets the needs of students." *Math Catalyst* offers short, targeted Tier 2 and Tier 3 lessons outside of core instruction. These lessons follow three–four sequenced objectives and use the "Progression of Mini Lesson Objectives" to address specific student needs.

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

The materials offer multi-tiered intervention strategies and educator guidance for implementation. In the "Possible Ways to Use Components" section of the *Implementation Guide*, "Concept Mini Lessons" are recommended for small-group instruction to "review, preview, strengthen skills and concepts," while "Practice and Application" components can "build stations" or offer direct instruction. "Practice Pages" support "spaced retrieval, spiral review, and interleaved practice," and "Application" tasks offer "enrichment and extension opportunities" and help "build fluency and automaticity."

According to the *Implementation Guide*, "*Math Catalyst* is a supplemental instructional resource designed to be used within a Multi-Tiered System of Supports (MTSS) to maximize student achievement in mathematics." It supports Tier 2 and Tier 3 instruction through short, targeted lessons delivered outside of core instruction and sequenced across three–four objectives. Lessons can be used in small groups or individualized settings, with "Practice and Application" activities offering aligned, guided, or independent practice. In kindergarten, these are combined into a single "Practice and Application" component.

The "Practice and Application" sections help teachers choose flexible activities based on student needs. For example, in grade 2, "Place Value: Compose, Decompose, and Represent Numbers to 1,200," materials suggest using any mix of activities to support understanding. Examples include solving word problems with the Read–Draw–Write process, playing number games, and completing multi-part tasks with a partner. "Practice Helpers" offer worked examples with sample solutions and guiding questions to support independent or partner work and can also be used during "Concept Mini Lessons" to model problem-solving strategies.

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

The materials include enrichment and extension methods that promote varied student engagement, along with implementation guidance for educators. The *Implementation Guide* states, "The Practice and Application stations can be used flexibly to engage students in aligned practice and enrichment activities," allowing them to "work independently, with a partner, or in a small group" to build fluency and automaticity. These components support differentiated instruction through targeted practice.

"Concept Internalization" in the *Implementation Guide* provides guiding questions for planning enrichment and extension across lesson components. In "Concept Mini Lessons," teachers are prompted to ask,

"What do my students already know? What can they already do? What do they need support with?" Similarly, in "Practice and Application" and "Progress Check," teachers reflect on questions such as, "How do the Practice Pages progress from simple to complex?" and "What does proficiency look like with the content of this concept?"

Additional support is embedded in each concept's "Practice and Application" section. For example, in grade 2, "Place Value: Compose, Decompose, and Represent Numbers to 1,200," the materials advise teachers to use a chart to "determine how to use the activities to best meet the needs of your students." Teachers can support students in solving problems involving composing, decomposing, and representing numbers to 1,200 by providing the "Read-Draw-Write Tool," encouraging partner work to compare solution paths and explore different representations, offering the "Solve a Problem Recording Page" as an alternative to personal whiteboards, and using place value charts and place value disks to help students build models and deepen their understanding.

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

The materials do not include prompts and guidance to support educators in providing timely feedback during lesson delivery. Guidance for educators comes at the beginning of the unit as teachers choose a starting point based on student skills, and at the end of lessons and units in the form of progress monitoring, but not as 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	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 include educator guidance on providing linguistic accommodations for all English language proficiency levels, as outlined by the ELPS. Although the *Implementation Guide* states that "Guidance for supporting EB students in making cross-linguistic connections through oral and written discourse is embedded in the Concept Guide," this guidance is uniform across grades K–2. The materials offer tips for EBs, including differentiated accommodations by proficiency level at the beginning of each concept's "Alignment Guide," which supports advancing students toward higher levels of academic language across lesson components.

The *Implementation Guide* notes that the "Alignment Guide" for each concept includes alignment to the English Language Proficiency Standards and highlights embedded supports for different levels of language proficiency." Most lessons include one embedded support, which often consists of gestures or visuals like number cards, and are similar across all lessons.

The materials include "Language Support" notes within some "Concept Mini Lessons," offering guidance to build vocabulary, comprehension, and background knowledge. However, not every lesson contains this support, and when provided, it typically consists of teacher-modeled phrases and simple sentence frames that are uniform across lessons. These methods primarily assist students at the beginning level of language acquisition and offer a scaffold for students progressing toward advanced proficiency.

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 include implementation guidance to support educators in effectively using the materials in state-approved bilingual/English as a Second Language (ESL) programs. The *Implementation Guide* contains support in the "Using *Math Catalyst* in State-Approved Bilingual/ESL Programs" section of the materials. A table is presented for educators with the "Instructional Model, Recommended Structure, and Recommended Modification" available to support educators in their specific program.

The "Using *Math Catalyst* in State-Approved Bilingual/ESL Programs" guidance includes references to the other sources of support available to the teacher. For example, in the row designated as the "Transitional Bilingual Early Exit/Late Exit" program, educators can use the materials "as designed, allowing the certified bilingual teacher to use materials ("Key Terminology," "Play a Game," "Family Math") creatively to support learning."

The *Implementation Guide* states that materials include "built-in support for emergent bilingual (EB) students so they can gain proficiency with the English they need to access the mathematics." Supports are embedded in the "Concept Guide," "Alignment Guide," and "Language Support" notes, including opportunities for students to speak with a partner before sharing with their peers and an exemplar response for teachers to clarify, restate, or summarize student output.

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 to support emergent bilinguals in increasing comprehension, building background knowledge, or making cross-linguistic connections through written discourse or increasing comprehension through oral discourse. Each "Concept Guide" contains "Key Terminology" cards and a "Family Math" page that references the same cards. When used in the classroom and at home, the cards increase "comprehension through discourse, leveraging home language through cross-linguistic connections, or supporting writing or spelling of key vocabulary."

The materials include guidance to support emergent bilingual students in building academic vocabulary, background knowledge, and making cross-linguistic connections through oral discourse. In "Subtraction:

Subtract Within 100 by Using Mental Strategies," students "turn and talk" about using a number line to subtract, while the teacher introduces terms like *subtract* and uses visual tools such as an open number line to support meaning. These strategies help students engage in math conversations and clarify new vocabulary.

The materials offer repeated, generic guidance for supporting oral cross-linguistic connections across all "Concept Guides." For instance, in "Place Value: Compose, Decompose, and Represent Numbers to 1,200," teachers are advised to create cross-linguistic anchor charts with key terms in English and students' home languages, along with images. The materials provide examples of "Key Terminology" along with visual support in English and Spanish to aid in the creation of these charts.

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	Materials do not include enrichment and extension materials that lead students beyond grade level.	2/4
—	TOTAL	4/6

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

The materials provide TEKS-aligned practice opportunities that develop conceptual understanding. Each concept includes worksheets, games, and hands-on activities in the "Practice and Application" section. For example, in the grade 2 lesson, "Place Value: Compose, Decompose, and Represent Numbers to 1,200," students use provided cards or a deck of cards and a partner to play "Place Value Top It," a game where students compose numbers up to 1,200 with the use of a place value chart if necessary.

Students demonstrate understanding by responding to teacher questions and completing structured tasks. For example, in the grade 2, "Concept Mini Lessons: Compose, Decompose, and Represent Numbers to 1,200," the teacher uses a question and answer session along with a show-and-tell method with place value cards and play money in a chart to determine place value. The teacher uses the "Monitor" section to identify gaps or misunderstandings in student responses.

In the grade 2, "Progress Check: Compose, Decompose, and Represent Numbers to 1,200" assessment, students use printed place value charts, sentence stems, and symbols to show understanding of TEKS 2.2B. Students are assessed using a rubric that measures proficiency in correctly using comparative language to describe the relationship between two numbers up to 1,200, applying place value understanding to compare numbers to 1,200 using symbols, ordering three or more numbers to 1,200 from least to greatest, and correctly using place value and mathematical symbols to order three or more numbers to 1,200.

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 do not include opportunities that move students beyond grade-level TEKS; however, they do include enrichment and extension tasks that increase in rigor. Teachers can select lessons based on student needs, with strands like "Place Value" spanning kindergarten through grade 5. However, all content remains within grade-level standards.

Instruction is structured around "Concept Mini Lessons" with hands-on "Practice and Application" activities for Tier 2 and Tier 3 support. For example, in grade 2, students complete a multi-part task using number lines and contextual information to locate numbers between multiples of 10 and 100. These tasks provide real-world applications and extend learning within the scope of TEKS 2.2E and 2.2F.

Each "Concept Mini Lesson" ends with an "Analyze Student Progress" section to assess learning, deepen thinking, and guide instruction. While enrichment and extension are embedded in the core content, they are limited in quantity. Typically, there are only two–three questions and three–four activities, offering minimal opportunity to move beyond grade-level expectations.

4.2 Coherence of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.2a	All criteria for guidance met.	1/1
4.2b	Materials do not demonstrate coherence vertically across concepts and grade bands, including connections from grade K–6, by connecting patterns, big ideas, and relationships.	0/1
4.2c	Materials do not 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.	0/4
—	TOTAL	1/6

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

The materials demonstrate coherence across concepts horizontally within the grade level by connecting patterns, big ideas, and relationships. The *Implementation Guide* notes that concepts build upon one another—for example, understanding multiplication foundations supports multiplying two-digit by one-digit numbers. The sequence of objectives highlights this horizontal alignment across lessons.

The *Strand by Grade: Scope and Sequence* outlines both horizontal and vertical alignment, showing how concepts build across and within grades. It states, "Concepts and Objectives within each strand build upon each other to form a ladder of mathematical understanding." In grade 2, students progress from "Add Within 100 With and Without Making New Tens" through "Add Within 1,000 by Using Mental Strategies," then transition to "Solve One-Step and Multi-Step Word Problems Involving Addition."

In grade 2, students begin composing, decomposing, and representing numbers up to 1,200 using play money to create sets of hundreds, tens, and ones before applying the concept with a form of number bonds and place value charts. This progression from concrete to abstract is reinforced in the "Addition: Add Within 1,000 by Using Mental Strategies" lesson, where students use the same form of number bonds and apply the concept of place value to add hundreds, tens, and ones on an open number line.

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 do not demonstrate coherence vertically across concepts and grade bands, including connections from grade K–6. The materials go through only grade 5.

In the *Implementation Guide* under "Supplemental Instructional Materials Design," the materials state, "Within a grade level, concepts are structured to build upon one another. For example, students learn

about the basic foundations of multiplication to apply this understanding when multiplying a two-digit number by a one-digit number. Similarly, concepts build across grade levels, such as when students apply their understanding of whole-number multiplication to multiply decimals."

In the *Strand by Grade: Scope and Sequence*, the materials list the concepts in strands with the vertical alignment of the concept from grades K–5. The materials state, "*Math Catalyst Texas* provides a mathematical progression of concepts unbound by the constraints of grade-level standards. Although the Texas Essential Knowledge and Skills (TEKS) are provided as a useful reference for teachers, the Concepts and Objectives within each strand build upon each other to form a ladder of mathematical understanding. These objectives can be used to find a student's last secure rung on that ladder—the rung where their knowledge is sturdy enough to stand on."

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 do not 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 do not include prompts or reviews for students to connect to prior learning or explanations about how their current learning is connected to future learning.

While each "Concept Mini Lesson" includes a "Progression of Mini Lesson Objectives" that helps teachers assess prior knowledge before instruction. In grade 2, "Subtract Within 1,000 by Using Mental Strategies," students begin with subtracting like units while using a number line, and progress to subtracting from hundreds without regrouping by using compensation. While this structure enables students to build on what they already know, it does not explicitly connect prior knowledge to current or future grade levels.

4.3 Coherence and Variety of Practice

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.3a	Materials do not include spaced retrieval opportunities with previously learned skills and concepts across learning pathways.	0/2
4.3b	Materials do not provide interleaved practice opportunities with previously learned skills and concepts across learning pathways.	0/2
—	TOTAL	0/4

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

Materials do not provide spaced retrieval opportunities with previously learned skills and concepts across learning pathways. The materials do not review previously learned skills or concepts across learning pathways and focus only on current learning.

Though the *Implementation Guide* recommends starting each lesson by sharing objectives and connecting them to prior learning and key terms and emphasizes using "Concept Mini Lessons" to help students analyze mathematical relationships between past and current concepts, there are no opportunities for spaced retrieval with previously learned skills across the learning pathways.

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

The materials do not provide interleaved practice opportunities, as the activities and interventions provided focus on solo objectives without addressing interleaving topics and skills.

Though the materials suggest stations built from "Practice and Application" components where teachers are encouraged via the "Components" and "Possible Ways to Use Components" sections of the *Implementation Guide* to assign practice pages for spaced retrieval, spiral review, enrichment, and fluency-building, these stations are not interleaved as part of the lessons or activities and are separate.

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 *Implementation Guide* explains that the program balances conceptual understanding and procedural skills through progressively complex "Concept Mini Lessons" and supporting "Practice" activities.

"Application" tasks extend learning by having students transfer knowledge to new contexts using tools and strategies of their choice. "TEKS Mathematical Process Standards" are integrated throughout as students use objects, drawings, numeric representations, and precise language to build understanding.

The materials provide opportunities for students to interpret and analyze visual models. In grade 1, "Place Value: Compose, Decompose, and Represent Numbers to 1,200, Objective 2," students examine a place value chart and a corresponding blank number bond to decompose three- and four-digit numbers. The lesson encourages the students to make the connection between place value and digits as the charts and bonds are set for four-digit numbers even if the answer is a three-digit number.

The materials use common misconceptions to deepen understanding of models and representations. In the grade 2, "Place Value: Compose, Decompose, and Represent Numbers to 1,200 Concept Guide," students use play money, place value charts, place value cards, and number bonds to create representations of numbers to 1,200. Teachers are prompted to, "Support students' understanding of place value by encouraging them to use charts when composing, decomposing, and representing numbers to 1,200," as many students "might not understand how to use the digit 0 to represent 0 of a place value unit. Students might record 6 hundreds 0 tens 4 ones in standard form as 64."

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

The materials include tasks that prompt students to create concrete and pictorial models of math situations. The *Implementation Guide* highlights the "Read-Draw-Write Tool," which uses visuals, prompts, and questions to support problem-solving. Students read the problem, create or adjust drawings as new information is discovered, and write number sentences or equations to represent their thinking.

Each "Concept Mini Lesson" provides questions and tasks for students to create models and pictorial representations. For example, in grade 2, "Subtraction: Concept Mini Lessons: Subtract Within 1,000 by Using Mental Strategies," students use open number lines and add labels to show subtraction as well as rewriting equations to show taking from a ten or a hundred to subtract. By the end of the lesson, students create their own models and pictorial representations subtract without regrouping by using compensation.

The "Progress Check Tool" includes tasks that progress from simple to complex, requiring students to create concrete and pictorial representations of learned concepts. In grade 2, "Place Value: Compose, Decompose, and Represent Numbers to 1,200," students use drawings to represent a three-digit number, then decompose the number using a number bond and a place value chart. By the end, students write the number in expanded, standard, or word form based on the presented task.

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

The materials provide opportunities for students to apply conceptual understanding to new contexts through all curriculum components. The *Implementation Guide* states, "The objectives in Concept Mini Lessons progress in complexity and provide opportunities for students to develop conceptual understanding and procedural fluency," while the "Practice" and "Application" components help students "solidify" skills and "transfer knowledge to new applications and build fluency."

Each strand's "Progression of Mini Lesson Objectives" supports applying conceptual understanding across tasks. In G2 "Addition: Concept Mini Lessons: Add Within 1,000 by Using Mental Strategies," students move from using a number line when one addend is a multiple of 10, to making a ten to add two-digit numbers using a number line. Students then apply this understanding to choose an efficient strategy to add up to four two-digit numbers, including combining skill sets.

Students extend learning in the "Practice and Application" sections by applying conceptual understanding in new situations. For example, in grade 2, "Addition: Add Within 1,000 by Using Mental Strategies," students play "Three in a Row" with the optional support of a number line to solve addition problems in a pre-printed game board. Students then "check each other's work. If they agree, the partner who added marks an X or an O in that space. If they disagree, they share their work with each other and find the mistake. A partner marks the space only if they solve the problem correctly."

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.

In the "Station Rotations" section of the *Implementation Guide*, the materials include two suggested schedules to support the use of the included materials to build student automaticity and fluency. Rotations include working with the teacher, one practice station, and two application stations for working independently or with peers on grade-level mathematical tasks.

According to the *Implementation Guide*, "Practice and Application" supports fluency-building through "spaced retrieval, spiral review, and interleaved practice," as well as through games. In grade 2, "Place Value: Compose, Decompose, and Represent Numbers to 1,200," students "compose numbers to 1,200 and represent them by using objects and a chart, represent numbers to 1,200 in unit form and show the value that each digit represents, and represent numbers to 1,200 in [standard, expanded, and word forms]" to reinforce TEKS 2.2B of using "standard, word, and expanded forms to represent numbers up to 1,200."

Each "Concept Mini Lesson" includes an "Analyze Student Progress" section with "Questions to Advance Student Thinking" that are paired with student tasks. For example, in the same grade 2 unit, the teacher asks, "How many of each unit is shown in the chart? How do you represent a place value with nothing in it by using place value cards?" These questions guide students in applying and articulating their understanding of place value concepts.

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

The materials consistently provide opportunities for students to apply efficient, flexible, and accurate mathematical procedures. The *Implementation Guide* highlights the "Read–Draw–Write Tool," which supports problem-solving by prompting students to draw representations, label knowns and unknowns, and write equations to reflect their thinking.

"Concept Mini Lessons" build procedural fluency through a progression of strategies. In grade 2, "Addition: Add Within 100 With and Without Making New Tens," students move from using place value disks and two-column charts to place value drawings, then connect their drawings to vertical form.

During the "Progress Check," students demonstrate procedural accuracy and flexibility by selecting appropriate methods to solve problems.

The "Practice and Application" section reinforces procedural skills using hands-on and visual tools. In grade 2, students use the "Read-Draw-Write" process, play partner games, and solve multi-part tasks involving addition within 100. These activities move students from concrete representations to abstract notation while reinforcing fluency.

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 mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy. In grade 2, "Concept Mini Lessons" for "Subtraction: Subtract Within 100 by Using Mental Strategies," students build representations of subtracting from like units using an open number line, a compensation algorithm and linking cubes, and strip diagrams. Students then apply this understanding to subtraction expressions by decomposing a ten number into two separate two-digit numbers, then subtracting using mental math or a number bond rather than relying on linking cubes or a number line.

Teachers use questions paired with tasks to assess students' ability to evaluate mathematical thinking. For example, in the "Analyze Student Progress" section of objective four in grade 2, "Subtraction: Subtract Within 100 by Using Mental Strategies," questions include, "What benchmark number can help you subtract? What are the parts if you take the benchmark number from the total? How do the parts help you find the difference?"

The "Practice and Application" component allows students to evaluate models and strategies independently or with a partner. In grade 2, "Subtraction: Subtract Within 100 by Using Mental Strategies," students solve subtraction word problems within 100 using mental strategies and the "Read-Draw-Write" process, play a partner game focused on subtracting within 100, and analyze a correct solution independently or with a partner. Students solve subtraction problems using a number line, counting on or back to a benchmark number, using compensation, or taking from a ten to subtract from a two-digit number, reinforcing subtraction skills through multiple representations.

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

The materials contain guidance to support students in selecting the most efficient approaches when solving mathematics problems. The *Implementation Guide* describes the "Read-Draw-Write Tool," which uses visuals, prompts, and questions to support problem-solving. Students break problems into parts, draw and label their thinking, write equations, and provide a written solution.

The "Progress Check Tool" supports strategic thinking through a sequence of increasingly complex tasks. In grade 2, "Addition: Add Within 100 by Using Mental Strategies," students progress from using linking cubes to adding ones to a multiple of ten, then decomposing an addend to make ten. These tasks encourage students to select efficient methods based on place value and number relationships.

The "Progression of Mini Lesson Objectives" builds efficiency by advancing from basic to more sophisticated strategies. In grade 2, "Subtraction: Subtract Within 100 by Using Mental Strategies," students start by subtracting using mental math and number lines. They then apply strategies such as counting on, using compensation, and finally subtracting with the "take from a ten" method.

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. The *Implementation Guide* states that program components are "structured to balance the development of conceptual understanding with procedural skills," with "Concept Mini Lessons" building complexity, "Practice" solidifying understanding, and "Application" promoting fluency through real-world contexts. This structure ensures students develop a deep understanding while gaining procedural accuracy and flexibility.

In "Concept Mini Lessons: Add Within 100 by Using Mental Strategies," students build conceptual understanding by using linking cubes, pictorial models, and number bonds to decompose addends and make tens. Teachers assess student understanding through questions that check whether students can identify the next ten, determine how many ones are needed, and rewrite the equation accordingly.

In "Application: Add Within 100 by Using Mental Strategies," students apply mental math strategies to solve problems independently or with a partner. Activities include using the "Read–Draw–Write" process, playing addition games, and completing multi-part tasks. These tasks develop procedural accuracy, efficiency, and flexibility.

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 questions and tasks that provide opportunities for students to use concrete models, pictorial representations, and abstract models as required by the TEKS. The *Implementation Guide* highlights the "Read–Draw–Write Tool," which provides visuals, prompts, and questions to support problem-solving. Students draw models, revise them as needed, label known and unknown quantities, and write equations to represent and explain their thinking.

Each "Concept Mini Lesson" begins with a progression from concrete to abstract representations. In grade 2, "Addition: Add Within 100 by Using Mental Strategies," students move from using linking cubes and number paths to decomposing addends and solving with number bonds. Lessons include tasks such as composing tens and answering questions like, "How can we make the next ten? How do you know?"

The "Progress Check Tool" reinforces the use of multiple representations to solve problems. In grade 2, "Addition: Add Within 100 by Using Mental Strategies," students solve addition sentences by using linking cubes, pictorial models, and written equations. These checks ensure students can apply concrete and abstract strategies effectively.

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.

Each "Concept Mini Lesson" contains "Teacher Tips" and "Language Support" notes, which offer guidance to educators to support students in explaining and defining concrete models, representational models, and abstract concepts. Guidance includes how to engage students in mathematical discourse with their peers to explain models and concepts, sentence frames and sentence starters to support students in defining and explaining concrete and representational models, and ideas for creating anchor charts to support understanding of models and concepts.

The materials support students in connecting and creating concrete and representational models to abstract concepts, as required by the TEKS. The "Read-Draw-Write Tool" guides students through solving problems using visuals, prompts, and questions that encourage drawing, labeling, writing equations, and forming complete responses. Additionally, the *Implementation Guide* emphasizes using objects, drawings, and numeric representations to help students analyze relationships and build conceptual understanding in both "Concept Mini Lessons" and "Application" tasks.

Embedded support helps students communicate mathematical ideas using objects, drawings, numeric representations, and precise language, with opportunities to select tools and techniques in both Concept Mini Lessons and Application tasks. Additionally, "Family Math" pages extend learning at home by guiding families to ask targeted questions that reinforce these connections, such as in grade 2's, "Add Within 100 by Using Mental Strategies," where students use pictures and prompts to apply addition strategies and explain their reasoning.

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 visuals, manipulatives, or other language development strategies using, for example, the "Read-Draw-Write Tool." For example, the *Implementation Guide* states, "The tool provides visuals, prompts, and questions to remind students how they can approach solving a variety of problems." Prompts include, "Ask, 'Can I draw something?' Then ask, 'What can I draw?' Draw to represent the problem as you reread . . . Label what is known and unknown. Ask, 'What does my drawing show me?' Write number sentences or equations to represent your thinking. Solve. Write a statement that answers the original question."

The materials include "Language Support" for students to develop academic mathematical language. For example, in grade 2, "Concept Mini Lesson: Compose, Decompose, and Represent Numbers to 1,200," the materials state, "Prompt students to use precise terminology as they compose numbers to 1,200 with play money. For example, rather than asking, 'How many ten-dollar bills are there?'—which may [elicit] the response '2'—ask, 'What is the value of the ten-dollar bills?' Precise language will support students with place value concepts."

In the "Application" sections of the materials, students use optional materials such as manipulatives and place value charts to develop their academic language. For example, in grade 2, "Place Value: Compose, Decompose, and Represent Numbers to 1,200," students collaborate in pairs to solve a multi-part task involving composing, decomposing, and representing numbers up to 1,200. They use contextual information to support their understanding and apply critical thinking with precise mathematical language to solve three related problems.

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 extend students' use of academic mathematical vocabulary in context when communicating with peers and educators. Each "Concept Guide" contains "Key Terminology" cards. Mathematical terms paired with visuals and a definition are presented in English and Spanish. Students and educators use these cards in various ways to extend academic vocabulary between peers, such as using the cards "as flashcards, as a portable word wall, to build background knowledge, or to use in semantic sorts."

The materials include embedded educator guidance to scaffold and support students' use of precise mathematical vocabulary during communication with peers and teachers. The *Implementation Guide* states, "*Math Catalyst* includes embedded support to help students understand and use precise mathematical language," noting that teachers model precision by restating student responses and using visuals. "Language Support" notes in "Concept Mini Lessons" provide additional scaffolding strategies to develop and reinforce vocabulary.

The guide emphasizes vocabulary consistency, especially when teaching composition and decomposition of place value, stating, "*Math Catalyst* strives for consistency by using the terms as indicated in the chart." Teachers are encouraged to "validate and restate students' statements" using alternative terms to deepen understanding. Students apply academic language with support—for example, in grade 2, "Place Value: Compose, Decompose, and Represent Numbers to 1,200," teachers offer a review of the concept using student language paired with academic language, stating, "When we write a number the regular way, we call it standard form. When we write the answer to $300 + 30 + 3$ as 333, we say 333 is written in standard form."

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 use of appropriate mathematical language and academic vocabulary in discourse. The *Implementation Guide* recommends the "Read-Draw-Write Tool," which "provides visuals, prompts, and questions to remind students how they can approach solving a variety of problems." It offers two versions of the tool, advising teachers to "select and print the version . . . appropriate for your students," and to consider laminating it for repeated use throughout the year.

Embedded support for students is found in "Concept Mini Lessons" in the "Language Support" section. For example, in grade 2, "Place Value: Compose, Decompose, and Represent Numbers to 1,200," the "Language Support" in Objective 2 states, "Use precise language to support students with place value

understanding." The materials then define the terms unit form, value, and digit with examples for each as it relates to the lesson.

Support for student application of appropriate mathematical language and academic vocabulary in discourse is found in the "Concept Mini Lessons." For example, in grade 2, "Addition: Add Within 1,000 by Using Mental Strategies," teachers invite students to turn and talk to their peers about how they can use a number line to help them add by using benchmark numbers. Sentence frames for students include, "___ is closest to a benchmark number. The benchmark number is ___. I need to take away ___."

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

The materials include embedded guidance to facilitate mathematical conversations, allowing students to hear, refine, and use math language with peers in "Concept Mini Lessons." For example, in grade 2, "Subtract: Subtract Within 1,000 by Using Mental Strategies," students review the use of a number line to move backwards to subtract. The materials state, "We can take away hundreds and tens by using backward hops on a number line. When there are not enough tens from which to subtract, we can decompose the part to get to a benchmark number, such as a hundred, and then subtract some more." Students are then invited to turn and talk with a partner about how they can use the number line to help them subtract like units, using mathematical language from the lesson.

The materials include "Teacher Tips" and "Language Support" in the "Concept Mini Lessons" to facilitate mathematical conversations. For example, in grade 2, "Addition: Add Within 1,000 by Using Mental Strategies," the "Teacher Tip" offers tips to support students in understanding the concept by using a number line. The materials state, "Some students may benefit from using open number lines and hops to show how the two expressions are equal." The "Language Support" offers support for the inclusion of mathematical terms. The materials state, "Consider providing a word bank to support student discussion. Include words and phrases such as *efficient*, *make a ten*, *benchmark number*, *decompose*, *addends*, and *total*."

In the "Application" section, students hear, refine, and use math language with peers. For example, in grade 2, "Place Value: Compose, Decompose, and Represent Numbers to 1,200," students work with a partner to solve a multi-part task involving composing, decomposing, and representing numbers to 1,200. Students use contextual information to support their understanding and apply critical thinking, along with mathematical language, to solve three related problems.

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, including exemplar responses to questions and tasks, including guidance to support and/or redirect inaccurate student

responses through structured teacher guidance. For example, the "Concept Mini Lessons" in each unit include crafted sample dialogues with anticipated student responses, exemplar answers, and strategies for refining or redirecting student thinking.

The materials include visual and analytical tools to support educators with various student responses. For example, lessons provide visual examples of proficient student work and include "Questions to Advance Student Thinking" at the end of each "Concept Mini Lesson" to help teachers identify misconceptions and scaffold guidance based on student responses.

Each "Concept Guide" contains a "Student Misconceptions" section, which includes explicit strategies for addressing common misunderstandings, enabling educators to give timely, targeted feedback that fosters accurate learning.

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	Materials do not include an overview of the TEKS process standards incorporated into each lesson.	0/1
—	TOTAL	3/4

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

The materials include TEKS process standards integrated appropriately into the materials. The "Family Math" page for each unit contains visual representations of the concepts to be taught, along with information for families. For example, in grade 2, "Place Value: Compose, Decompose, and Represent Numbers to 1,200," students use place value charts and number bonds to represent numbers up to 1,200 and show the number in standard, word, and expanded form. Students use an image of a number bond and a place value chart to represent the number 746.

Each "Concept Mini Lesson" includes a "Progression of Mini Lesson Objectives" that outlines the concept, tools, and representations used. For example, in grade 2, "Place Value: Compose, Decompose, and Represent Numbers to 1,200," the "Progression of Mini Lesson Objectives" lists play money, number bonds, place value cards, and place value drawings to support composing and decomposing numbers to 1,200. Students select appropriate tools, solve problems using manipulatives, and explain their thinking through symbols, diagrams, and precise language both verbally and in writing.

In "Application," students access the integrated TEKS process standards by using appropriate tools and techniques to solve problems and communicating and justifying their mathematical thinking using various representations. For example, in grade 2, "Place Value: Compose, Decompose, and Represent Numbers to 1,200," students collaborate in pairs to solve a multi-part task involving composing, decomposing, and representing numbers up to 1,200. They use contextual information to support their understanding and apply critical thinking to solve three related problems with the use of a place value chart and linking cubes to build a model of their solution.

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 *Implementation Guide* states, "The TEKS Mathematical Process Standards (MPS) are seamlessly woven into different components of the program." Integration of the process standards includes students communicating mathematical ideas using various representations and precise language, choosing appropriate tools and methods to solve problems in

"Application," and exploring relationships between past and current concepts to deepen understanding in "Concept Mini Lessons."

The "Alignment Guide" for each strand lists the TEKS and the process standards for each concept. For example, the "Place Value" strand lists process standards 1.C, 1.D, 1.E, 1.G for grade K, "Compose, Decompose, and Represent Teen Numbers," process standards 1.A, 1.C, 1.D, 1.E, 1.G for grade 1, "Compose, Decompose, and Represent Numbers to 120," and process standards 1.A–1.G for grade 2, "Compose, Decompose, and Represent Numbers to 1,200."

The *Strand by Grade: Scope and Sequence*, states "*Math Catalyst Texas* provides a mathematical progression of concepts unbound by the constraints of grade-level standards. Although the Texas Essential Knowledge and Skills (TEKS) are provided as a useful reference for teachers, the Concepts and Objectives within each strand build upon each other to form a ladder of mathematical understanding." Teachers use the objectives and current student data to determine a starting point for the student based on the strand versus the specific TEKS.

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

The materials do not include an overview of the TEKS process standards incorporated into each lesson. The "Alignment Guide" for each unit lists the TEKS process standards incorporated into the unit, but the full process standard is not defined. The TEKS process standards are not included in any other overviews. The *Implementation Guide* states, "Although all components provide space for TEKS MPS by design, the "Alignment Guides" help teachers track which TEKS MPS are emphasized in each concept. More than one TEKS MPS may be identified per concept."

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 opportunities for students to think mathematically during "Concept Mini Lessons" and "Questions to Advance Student Thinking." For example, in grade 2, "Concept Mini Lesson: Addition: Add Within 100 With and Without Making New Tens," students build their understanding of adding like units, using math drawings and written recordings to add two-digit numbers, and recording composed tens in vertical form. The "Questions to Advance Student Thinking" further support students by asking, "How can you decompose the addends into tens and ones? How does breaking apart numbers and adding like units help you add two-digit numbers?"

The materials provide opportunities for students to persevere through solving problems using the "Read-Draw-Write Tool" from the *Implementation Guide*, which "provides visuals, prompts, and questions to remind students how they can approach solving a variety of problems." Students persevere by reading parts of the problem, asking questions to themselves about the problem, creating drawings and representations, labeling the knowns and unknowns, and finally adding number sentences and statements to their solutions.

The materials provide opportunities for students to make sense of mathematics by providing "Application" sessions. For example, in the grade 2, "Addition: Add Within 100 With and Without Making New Tens," students work independently or with a partner to solve problems, play games, and complete tasks to develop an understanding of adding within 100 with and without making new tens using place value charts, decks of cards, highlighters, whiteboards, and included "Student Pages."

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 that there can be multiple ways to solve problems and complete tasks. For example, in grade 2, "Concept Mini Lesson: Addition: Add Within 100 With and Without Making New Tens," the "Questions to Advance Student Thinking" asks, "How can you show both

addends with your drawing? Can you compose a ten? . . . How can you add like units in your written recording?"

The materials support students in explaining that there can be multiple ways to solve problems and complete tasks. For example, in the grade 2 "Application" for "Addition: Add Within 1,000 by Using Mental Strategies," students explore mental math strategies for addition using number paths, number mats, and optional place value charts. In each task, students are invited to share their work with a partner to "share solution paths and make connections between different representations."

The materials support students in justifying that there can be multiple ways to solve problems and complete tasks. For example, in the grade 2, "Concept Mini Lesson: Addition: Add Within 100 With and Without Making New Tens," students determine their favored way to add $24 + 27$. The materials state, "What models or strategies could we use to add 24 and 27?" with responses including, "Add tens to tens and ones to ones, draw on a place value chart, [and] write them in expanded form and then add."

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 are designed to require students to make sense of mathematics through multiple opportunities for students to do math with peers and/or educators using "Application." For example, in grade 2, "Subtraction: Subtract Within 1,000 by Using Mental Strategies," students work in pairs to practice subtraction within 1,000 by using the "Read-Draw-Write Tool," playing a game, and solving tasks all while sharing their thinking and problem-solving strategies with their peers.

The materials are designed to require students to make sense of mathematics through multiple opportunities for students to write about math with peers and/or educators by using the "Read-Draw-Write Tool" from the *Implementation Guide*, which "provides visuals, prompts, and questions to remind students how they can approach solving a variety of problems." Students read parts of the problem, ask questions to themselves about the problem, create drawings and representations, then label the knowns and unknowns. Finally, students add number sentences and written statements to their solutions.

The materials are designed to require students to make sense of mathematics through multiple opportunities for students to discuss math with peers and/or educators using "Questions to Advance Student Thinking." For example, in grade 2, "Concept Mini Lesson: Subtraction: Subtract Within 1,000 by Using Mental Strategies," questions include, "What can you subtract from both numbers to create a simpler subtraction problem? What makes this new problem simpler to solve? How can you use place value to solve it? What makes two subtraction expressions equivalent? How can you show it on the number line?"

6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	All criteria for guidance met.	6/6
6.2b	Materials do not include prompts, and guidance to support educators in providing explanatory feedback based on student responses.	2/4
—	TOTAL	8/10

6.2a – Materials support educators in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications.

The materials support educators in guiding students to share their problem-solving approaches, including explanations, arguments, and justifications. For example, in grade 1, "Concept Mini Lesson: Addition: Add Within 100 With and Without Making New Tens," students use drawings within a place value chart to visualize creating a new ten. Students are encouraged to "turn and talk about how the place value drawing is like the expanded form written recording" while using their drawings, the chart, and their expanded form notes.

The materials support educators in guiding students to reflect on their problem-solving approaches, including explanations and justifications through the use of "Questions to Advance Student Thinking." For example, in grade 2, "Concept Mini Lesson: Addition: Add Within 100 With and Without Making New Tens," questions include, "What is each addend in unit form? How does the unit form help you represent the addends with a drawing on a place value chart? How can you add like units in your written recording?" Students use the tools available to them to justify their explanation.

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

The materials do not include prompts or guidance for explanatory feedback based on student responses. The materials include "Teacher Tips," which include various types of support. However, the tips do not include prompts or guidance that support the educator in providing explanatory feedback based on student responses.

The materials do include prompts and guidance to support educators in providing explanatory feedback based on anticipated misconceptions. However, the guidance is found at the beginning of the unit and not in the lessons. For example, in the "Concept Guide" of grade 2, "Subtraction: Subtract Within 1,000 by Using Mental Strategies," the common misconception among students is not understanding how to appropriately apply the compensations strategy to subtract from hundreds without regrouping. Teachers are prompted to use a number line to "help students see that when they subtract one from the total and the known part, they create an equivalent expression," which results in a simpler problem. Teachers are given a list of questions to support students at each step of the process.