

# Amplify Education, Inc.

English Mathematics, 1

Amplify Desmos Math Texas G1 Student Blended Package

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
<b>Full-Subject, Tier-1</b>	<b>9798895806760</b>	<b>Both Print and Digital</b>	<b>Static</b>

## Rating Overview

TEKS SCORE	ELPS SCORE	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	100%	31	Flags Not in Report	Flags in Report	0

## Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. <a href="#">Intentional Instructional Design</a>	28 out of 28	100%
2. <a href="#">Progress Monitoring</a>	26 out of 26	100%
3. <a href="#">Supports for All Learners</a>	27 out of 27	100%
4. <a href="#">Depth and Coherence of Key Concepts</a>	19 out of 19	100%
5. <a href="#">Balance of Conceptual and Procedural Understanding</a>	41 out of 41	100%
6. <a href="#">Productive Struggle</a>	22 out of 22	100%

## Breakdown by Suitability Noncompliance and Excellence Categories

SUITABILITY NONCOMPLIANCE FLAGS BY CATEGORY	IMRA REVIEWERS	PUBLIC	Flags NOT Addressed by November Vote
1. Prohibition on Common Core	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	8
Category 6: Promoting Sexual Risk Avoidance	0

# IMRA Quality Report

## 1. Intentional Instructional Design

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

### 1.1 Course-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.1a	All criteria for guidance met.	4/4
1.1b	All criteria for guidance met.	2/2
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
—	<b>TOTAL</b>	12/12

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

In the "Scope and Sequence," each unit of the materials is given a page with sub-units listed, and then individual lessons are listed under those. Next to each lesson is a section where the shorthand reference for the Texas Essential Knowledge and Skills (TEKS) in that lesson is listed, providing a scope and sequence for the TEKS for the entirety of the materials for grade 1; listed next to the TEKS is the English Language Proficiency Standards (ELPS). In this section of the materials, each unit of the materials is given a page with sub-units listed, and individual lessons are listed under those. Next to each lesson is a section where the shorthand reference for the TEKS and ELPS in that lesson is listed, providing a scope and sequence for the TEKS and ELPS for the entirety of the materials for grade 1.

On the pages titled "Proficiency-leveled ELPS Support," the materials state, "One activity in each lesson is paired with additional language support located in the 'Math Language Development Resources' booklet." There are lesson-level supports at each proficiency level, as well as unit-level and course-level supports provided.

In the front pages of the *Teacher Edition*, there is a document titled "Texas English Language Proficiency Standards (ELPS)" in which each student expectation for listening, speaking, reading, and writing is outlined, and a list of unit numbers, lesson numbers, and "Math Language Development Resources" are provided for each ELPS standard.

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

On the pages titled "Scope and Sequence, Grades K-5," each unit lists the number of instructional days and the number of assessment days required to teach the unit lessons. The pacing for each grade level is specific to that grade level and varies between grade levels. At the bottom of the document, suggestions for pacing changes based on varying number of instructional days is provided.

In the grade 1 *Teacher Edition*, there is a suggested pacing guide to support effective implementation. Each unit overview provides a pacing guide for suggested implementation for two different options: 165 instructional days and 210 instructional days.

For 165 instructional days, the guidance is to "Refer to the Pacing Considerations on the Unit Overview pages." For 210 instructional days, the guidance is to "Consider supporting students before or after quizzes and assessments with Centers and other resources" and "Consider adding a day of practice focus per week."

**1.1c – Materials include an explanation for the rationale of unit order as well as how concepts to be learned connect throughout the course.**

The grade 1 materials include an explanation for the rationale of unit order, which connects the TEKS to lessons previously presented and those slated in the future. These examples are provided in the unit overview and each lesson planning guide.

In the grade 1 "Teacher Edition," there is a rationale of unit order in the "Designed Around the TEKS" section. The rationale is broken down by unit with an explanation under each that explains how lessons within the unit connect with one another, as well as connect with previous and future grade levels. For example, for Unit 2, "Story Problems Within 10," "This unit is placed in the beginning of grade 1, immediately after Unit 1, as students' fluency with adding and subtracting 1 and 2 and making 10 prepares them to solve story problems within 10 in Unit 2."

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

On the pages titled "Navigating This Program," there is a set of resources for each unit that includes an overview of the unit's match, a visual summary of the "Unit at a Glance," a preview of each of the unit assessments, and unit guidance for differentiation, centers, accessibility, language development, materials, technology, and connections to "Future Learning."

Each unit overview also includes a professional development activity and a "Unit Story" that provides an engaging narrative to frame students' explorations throughout the unit.

The lesson overview, in the "Navigating This Program" sections, provides an explanation of the purpose of the Warm-Up activities, Synthesis, and Show What You Know. There is suggested timing for each part of the lesson, as well as guidance on whether students should work individually, in pairs, in small groups, or with the whole class. The page also lists which materials may be needed, as well as an understanding of what content students will learn, and includes a "Key Concepts" and "Connections and Coherence" section for deeper teacher internalization.

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

In the "Professional Development Library," there are three resources available for Instructional Leaders to support the implementation of the program in the classroom. The "K–5 Look-for Guide" provides a checklist of items and behaviors for Instructional Leaders to look for in each of the following areas: "Classroom Set-Up & Materials," "Structured Approach to Problem-Based Learning," and "Student Thinking Is Made Evident." The "In the Moment Instructional Support Cards" provide possible questions and scenarios that teachers can ask of themselves or Instructional Leaders can use to facilitate a discussion regarding ways to make the teaching and learning more effective. The "Facilitator Guide: End-of-Year Reflection" is a resource that provides Instructional Leaders with a set of questions intended to reflect on the overall implementation of the program across the academic year and find areas and actions to continue to work on in the next year.

In the "K–5 Look-for Guide," there is a checklist that instructional leaders can use to guide them to ensure teachers are correctly implementing the *Amplify Desmos Math Texas* curriculum. Important sections to look at include "Instructional Set-Up," "Structured Approach to Problem-Based Learning," and "Student Thinking."

## 1.2 Unit-Level Design

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

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

The grade 1, Unit 2 *Teacher Edition* equips each unit with an overview. Under the "Connections and Coherence" section, "Prior Learning" and "Future Learning" for the lesson is reviewed. For example, in Unit 1, "Students made connections between counting and addition and subtraction, and they represented addition and subtraction situations with expressions and equations," and in Unit 3, "Students will represent and solve story problems within 20, including problems with 3 addends. They will continue to develop addition and subtraction fluency within 10 while finding sums and differences within 20."

In the *Teacher Edition* unit overview, the page titled "Vocabulary of the Unit" lists the new vocabulary, review vocabulary, and contextual vocabulary of the unit needed for completing the lesson activities. Strategies for teaching the new vocabulary are also provided (e.g., using word structure (prefixes) and the Frayer Model).

In the grade 1 online platform for each unit, there is an overview of the skills taught and vocabulary used (review, contextual, and upcoming) in each unit.

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

In the "Paper Resources" unit overview section, there is a letter in English and in Spanish, providing families with a visual representation of the strategies being taught in the unit and the academic vocabulary necessary for comprehension.

The "Caregiver Hub" in the online resources is available in both English and Spanish. This resource offers information for caregivers to be able to engage in their student's learning. Under the section "How can I support math learning at home," there is a Spanish PDF for each unit. The PDF includes an overview of what is learned, a summary of each lesson, and a quick practice section.

Resources include review practice problems with questions to ask during the practice, games to play to reinforce the learning, unit stories to re-read and discuss, finding math and reinforcing learning in everyday life, and access to a collection of free K–5 lessons and activities offered in the materials.

## 1.3 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.3a	All criteria for guidance met.	8/8
1.3b	All criteria for guidance met.	3/3
1.3c	All criteria for guidance met.	1/1
—	TOTAL	12/12

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

The grade 1 materials present lessons that include the TEKS and ELPS being covered, daily objectives and sub-unit goals, questions to assess understanding and to promote the use of language, a variety of whole group, small group, center activities, lesson activities, and formative and summative assessments to master the lesson objectives.

The activity section of the grade 1 lessons is broken into parts. The "Monitor and Connect" sections both have questioning to ensure student understanding. These sections also include information on how these questions support Emergent Bilingual (EB) students, and how to connect these questions to assess if students are understanding the material.

Throughout the grade 1 lesson pages, there are multiple opportunities for students to engage in practicing and mastering the lesson objectives. There are whole group activities, paired activities, and independent practice. Some of the independent practice includes optional worksheets to assess the learning that has been achieved in each lesson.

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

In the grade 1 "At a Glance" section of the online teacher materials, there is a summary of the lesson. A prep checklist is included, as well as additional materials needed. There is also a "Lesson at a Glance" that has an overview of the activities and the time frame needed to complete it.

In the grade 1 unit overviews there is a section titled "Material and Prep." There is a list of resources used in the unit and where to find them in the program materials. The program lists materials from the manipulative kit that will be used in that unit, classroom materials that will be needed and the corresponding lesson number, and additional resources, such as digital resources, centers, assessment resources, and *Intervention and Extension Resources*.

Within each unit, a "Lesson at a Glance" page is provided for each lesson. In the "Lesson at a Glance," a suggested time for the lesson components is given by each component. For example, in a 60-minute lesson, the different components of the lesson are assigned a suggested time: Warm-Up (10 minutes), Activity 1 (15 minutes), Activity 2 (15 minutes), etc.

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

In the grade 1 materials, the section titled "Differentiation—Teacher Moves" provides teachers with examples of student responses to observe and ways that teachers can respond to support, strengthen, and/or stretch learning.

In the grade 1 "Extensions," found in the online platform, there is an option for each lesson within the unit to extend learning. For example, in grade 1, Unit 3, Lesson 1, "Kenny's Recital," on the *Teacher Edition* "Lesson at a Glance" page, the section titled "Opportunities for Extension" provides a suggestion for further questioning and probing that teachers can do to extend the learning.

The grade 1 "Boost Personalize Learning" found in the online platform includes an online activity paired to the lesson objective. Teachers can assign this to students needing extended practice. Students work their way through an online interactive activity where students practice their recently learned skills.

## 2. Progress Monitoring

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

### 2.1 Instructional Assessments

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

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

Each unit in the grade 1 materials is equipped with a Pre-Unit Check. Students can complete this in digital or paper form. Questions are posed in multiple choice with an illustration of the answer. This assesses students' prior knowledge and offers differentiation to strengthen students' learning. Additionally, each unit in the grade 1 curriculum has "Sub-Unit Quizzes" to assess learning progression throughout each lesson of the units. These are given after multiple lessons throughout the unit, online or on paper, until the summative assessment.

The grade 1 materials also offer opportunities for formative assessment daily in the Synthesis and Show What You Know lesson subsections. This is detailed in the "End-of-Lesson Assessment," which states, "each lesson has a daily formative assessment focused on key concepts in the lesson."

In each grade 1 unit, the materials include an End-of-Unit Assessment offered in paper form. For example, Unit 4 offers different question types (i.e., multiple choice and fill in the blank) and assesses multiple types of tasks.

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

The grade 1 curriculum features a unit overview that outlines the materials to be used, the corresponding TEKS, and the anticipated outcomes, as well as explicates the intended purpose of the various instructional assessments included. This overview provides important details on the definitions and intended uses of each assessment, demonstrating how these assessments drive instruction and help teachers monitor student progress.



The grade 1 "Assessment Resources Overview" details the kinds of assessments and the purpose of the assessments in the materials. The "Assessment Overview" states, "Throughout the lessons, units, and course, teachers will find summative and formative assessments that provide insights into students' conceptual understanding, procedural fluency, and application, as described in the grade-level standards." There are assessment opportunities embedded into daily lessons through the form of digital lessons, which "offer moments of assessment and provide valuable information for both the teacher and students."

The *Grade 1 Teacher Edition Overview* defines the types of assessment materials included in the curriculum. For example, it states that "Sub-Unit Checklists enable teachers to observe key skills and concepts that cannot be assessed on a pencil-and-paper assessment."

### **2.1c – Materials include teacher guidance to ensure consistent and accurate administration of instructional assessments.**

The grade 1 materials include teacher support designed to guarantee the reliable and precise administration of summative instructional assessments. This is illustrated through an "End-of-Unit 5 Assessment" rubric that highlights the TEKS assessed in each question. The rubric also includes grading criteria for each question in the areas of meeting, approaching, developing, and beginning.

All units in the grade 1 materials include a Pre-Unit Check, which allows teachers to "learn more about students' understanding of foundational concepts and skills that will support them". For example, in the Pre-Unit Check for Unit 3, teachers are provided guidance on how the assessment will be administered, as well as a time frame for the evaluation, which is to be completed independently within 20 minutes. Materials needed to complete the assessment are listed, explaining to the teacher to "Provide access to ten-frames, connecting cubes, and two-color counters". The teacher guidance states, "Assign the Pre-Unit Check to learn more about your students' understanding of foundational concepts and skills that will support them in Sub-Unit 1, and read the problems aloud to students as needed."

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

The grade 1, Unit 3 Pre-Unit Check includes the TEKS listed that will be assessed. These support the objectives that the students will be learning within the unit.

Formative and summative TEKS and objectives that will be assessed are outlined within each lesson and unit for the grade 1 curriculum. For example, Unit 6 includes the TEKS being assessed during the listed End-of-Unit Assessment. The TEKS and lesson goals are covered at the beginning of each lesson on the grade 1 "Teacher Edition" under "Key Concepts."

The grade 1 materials incorporate formative assessments that are consistent with the TEKS and the objectives of the unit. This alignment is evidenced in the Warm-Up and Activity 1 sections found in the *Teacher Edition* of Unit 3, Lesson 10.

Each unit in the grade 1 materials includes a summative assessment in the form of an End-of-Unit Assessment that allows teachers to "learn about your students' understanding of concepts and skills in this unit." In the *Teacher Edition* on the "Assess and Respond" page, which includes teacher guidance for the assessment, there is an "Item Analysis" section that provides the concept or skill associated with each problem, as well as the TEKS aligned to each problem in the assessment.

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

The grade 1 materials include "End-of-Unit Assessments" that are TEKS-aligned. The items vary in complexity levels, which are measured using the DOK system. The "End-of-Unit Assessments" consist of TEKS-aligned items at only DOK levels I, II, and III. The TEKS-aligned items do not contain levels of complexity at DOK level IV.

The grade 1, Unit 3 End-of-Unit Assessment has varying levels of complexity when demonstrating knowledge. Students are expected to draw and write to explain answers, select multiple choice, and solve standard equations.

This TEKS-aligned End-of-Unit Assessment requires grade 1 students to represent knowledge of numbers in standard form and expanded form. Students must also count to add coins and provide a written explanation of number values. In the "Assess and Respond Item Analysis" in the online resources, the DOK levels for each item are provided with either a DOK I or II for all seven of the TEKS-aligned items. The DOK levels do not exceed to levels III or IV.

## 2.2 Data Analysis and Progress Monitoring

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

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

The grade 1 materials include instructional assessments and scoring guidance to help teachers interpret scores and take appropriate action to increase scaffolding activities, thereby helping students achieve mastery or build upon their existing knowledge. For example, the End-of-Unit Assessment has four levels of student achievement and provides instructional steps to take moving forward.

The grade 1 materials include a rubric for the "End-of-Unit Assessments." The rubric outlines how to interpret each student's response on the assessment to determine if the student is exceeding, meeting, approaching, or beginning the TEKS standard.

The grade 1 End-of-Unit Assessment rubric for Unit 7 "Geometry and Time" includes scoring information along with examples of answers. Possible misconceptions are also broken down for Problems 1, 2, and 5. For example, the rubric states on Question 1 that "Students who select 12:25 may have confused the minute and hour hands and need support distinguishing between the hands on the clock."

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

The grade 1 "Assess and Respond" section offers guidance for teachers to extend student learning based on their End-of-Unit Assessment data. There is an "Item Analysis" section that outlines the skills and concepts for each problem. There is also a section titled "Differentiation (End-of-Unit Assessment)" that outlines support recommendation activities for each problem and task.

In the grade 1 Show What You Know formative assessment section within each lesson is accompanied by a table with suggestions in three categories: "students who need support, students who would benefit from more practice to strengthen their understanding, and students who are interested in a stretch to deepen their understanding." Teachers are provided with materials to assist students in all three categories to support their learning.

Throughout the grade 1 materials and lessons, there are sections for teachers titled "Differentiation—Teacher Moves." As teachers monitor student performance in lesson activities, these sections of the units

guide teachers in what to look for in students' work and responses, and ways to respond to either support, strengthen, or extend students' understanding.

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

In the student materials for grade 1, each unit has a "Watch Your Knowledge Grow" page with the concepts and skills of that unit outlined. Students self-assess their level of knowledge at the beginning of the unit and then again at the end of the unit by bubbling in a chart to assess their learning, with teacher assistance, indicating for each skill or concept either "Not Yet," "Almost," or "I Got It!"

In grade 1, for each Sub-Unit Assessment, on the checklist pages, the materials include a page provided for teachers to keep a list of their students and notes about each student's progress toward mastery of the skills and concepts of that sub-unit.

The grade 1 materials include tools for teachers to track student progress and growth. For example, the teacher's dashboard features a "Summary View" for each student, along with a quick overview of student performance, a symbol describing their work on each screen, and an indicator if the teacher has sent feedback. This tool, included in the materials, can help identify students who need additional support or who are ready for extensions.

### 3. Supports for All Learners

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

#### 3.1 Differentiation and Scaffolds

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

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

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

The grade 1 materials include teacher guidance for differentiated instruction, activities, and paired lessons for students who have not yet reached proficiency on grade-level content. For example, the grade 1 materials include a document titled *Intervention and Extension Resources*. The differentiation resources provide beyond-the-lesson support for those students needing additional instruction and practice with a concept or skill. These resources include mini-lessons, which are 15-minute targeted intervention lessons to support students with a specific concept or skill.

In grade 1, Unit 6, Lesson 5, the mini-lesson on measuring length up to 120 length units includes a modeled review section (with teacher guidance and notes provided), a guided practice section, and questions for student reflection in wrapping up the mini-lesson. There are suggestions for further mini-lessons for students who are still not grasping the concept and suggestions for further practice for those who have mastered the concept.

The "Differentiation" component of each grade 1 lesson is equipped with activity suggestions and mini-lessons for students who are not at the proficiency level. For example, in Lesson 14, it suggests for the teacher to "Assign the Using Comparison Symbols" mini-lesson." There is also a paired worksheet to review the skills taught in the mini-lesson.

The grade 1 materials include teacher guidance for differentiated instruction, as well as activities and paired lessons for students. For example, Unit 2, Lesson 10 features a "Personalization" section that allows teachers to personalize learning by assigning the personalized practice activity that aligns with the lesson and provides differentiated and adaptive support.

### **3.1b – Materials include pre-teaching or embedded supports for unfamiliar vocabulary and references in text (e.g., figurative language, idioms, academic language). (T/S)**

The grade 1 overview materials include a document titled "Math Language Development Resources." In the section titled "Vocabulary Routines," there are four routines: Frayer Model, Total Physical Response, Word Connections, and Word Structure. These routines "were strategically selected to invite and celebrate student participation and to provide consistent and structured approaches to building language acquisition skills." The grade 1 resource provides suggestions for using vocabulary routines in the Synthesis moment for lessons in which new vocabulary words are introduced. For example, in Unit 4, Lesson 17, in the Synthesis portion of the lesson, the vocabulary words *goods* and *services* are defined. Students are asked to use the Word Connections routine to name two things that *goods* and *services* have in common, and one thing that is different.

The grade 1 materials include vocabulary cards for each vocabulary word introduced. Each new vocabulary term is listed on the "Vocabulary Cards" PDF for each unit with a supporting teacher notes page. These cards are to be used throughout the unit and grade. For example, the grade 1, Unit 3 materials include lesson support for teaching the singular and plural forms of *one* and *ten*, and then use the vocabulary appropriately in mathematical context when speaking to a partner about place value of digits.

The grade 1 materials include pre-teaching or embedded supports for vocabulary and text references. For example, the overview of grade 1, Unit 7 includes a "Vocabulary of the Unit" section where every lesson includes opportunities for all students to access mathematical and non-mathematical vocabulary and actively participate in their own vocabulary development. The grade 1, Unit 7, Lesson 3, Activity 2 resources include a chart to accompany instruction requiring students to describe the physical attributes of shapes using academic vocabulary.

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

The grade 1 materials include a resource titled *Intervention and Extension Resources*. The extension activities are presented after each sub-unit set. "Extensions build on our student-led, problem-based approach because they provide more opportunities for students to engage in creative and rigorous problems that can be approached using different strategies." The activities are "print-based, hands-on problems structured on the principle of student choice and designed to be student-led. The math is designed to be accessible to students at any time they are ready for more during the sub-unit." For example, in grade 1, Unit 5, Sub-Unit 2, students have been working on different ways to make a number. The extension activity for this sub-unit has two problems, which requires students to compose and decompose a given number up to 120 in a variety of ways using place value and base-ten blocks.

The grade 1 materials include "digital, adaptive practice that provides personalized support targeting a skill or concept aligned to the unit." As part of the "Strengthen and Stretch" knowledge goals of the program, digital resources are included with each unit for this purpose. "Math Adventures are strategy-based, digital math games offering students a fun, engaging, and low stakes way of practicing math skills." For example, in grade 1, Unit 6, the Math Adventures digital activity is titled "Number Jumpers," where students practice addition and subtraction facts as their game avatar jumps from platform to platform through a variety of obstacles.

Each grade 1 unit includes an "Extension" section. There are activity suggestions for "students who want to extend their thinking," and a paired Teacher Edition. An example in Sub-Unit 1 is "Look at each set of shapes and draw the missing shape." Students must understand the puzzles to figure out the missing shape.

## 3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	All criteria for guidance met.	4/4
3.2b	All criteria for guidance met.	2/2
3.2c	All criteria for guidance met.	3/3
—	<b>TOTAL</b>	9/9

### 3.2a – Materials include explicit (direct) prompts and guidance to support the teacher in modeling and explaining the concept(s) to be learned.

The grade 1 *Teacher Edition* includes explicit directions and guidance to support the teacher in modeling and explaining the concept. For example, in Unit 5, Lesson 5, Activity 1, the lesson begins with a "Launch" and includes directions and a teacher script to use when displaying the problem. Students are asked to use a learning routine to share ideas and answer the question posed by the teacher. Next, the lesson includes a "Monitor" section with question prompts the teacher can ask students, particularly students who are having difficulty getting started with the task. Finally, the lesson includes a "Connect" section. In this section, there are guiding questions for the teacher to ask, and explicit steps to take when explaining the concept. In this lesson, students are asked to "share their compositions and strategies for finding different ways to compose a hundred, including students who used 10 tens, 100 ones, and a combination of tens and ones." The teacher is provided guidance to explain the concept based on student responses.

The lesson materials for grade 1, Unit 5, Lesson 5, Activity 1, include a "Differentiation/Teacher Moves" chart that guides teachers in what to look for and listen for from students during the "Monitor" and "Connect" parts of the lesson. For example, to differentiate a lesson based on students' responses and teacher's observations, the materials suggest teachers look for students who "represent 100 with a combination of tens and ones." The chart then offers an example of what that might look and/or sound like. Finally, the chart provides guidance on how teachers can extend the learning of the concept for students who have shown mastery. The suggestion is that teachers ask questions such as, "What other combinations of tens and ones could you use? What patterns do you notice between the amounts of tens and ones?"

### 3.2b – Materials include teacher guidance and recommendations for effective lesson delivery and facilitation using a variety of instructional approaches.

In the grade 1 overview booklet, the materials include a section titled "Instructional Routines." There are twenty instructional routines listed that are used throughout the program in various lessons. For teachers needing guidance in implementing them, further information can be found under the "Professional Development" tab. The instructional routines are listed in a PDF document. By clicking on one of the routines, the teacher is given an explanation of the routine and how to facilitate its use in lessons.



A variety of instructional approaches are embedded into grade 1 lessons. For example, Unit 3, Lesson 5 uses the instructional approach of "Which One Does Not Belong?" The materials explain that this "communicates to students that their ideas have value, that there are many ways to be correct in math, and that they can learn math by sharing their math thinking with each other." Another example is in Unit 3, Lesson 4, which uses "Stronger and Clearer Each Time." The materials explain that this "communicates the importance of feedback and creates an opportunity for students to learn from each other."

The grade 1, Unit 7, Lesson 7 uses the instructional approach of "Think-Pair-Share." This approach has students reflect on their activity, with the teacher asking questions, such as, "A glue stick is smaller than a chicken soup can. Does this mean they are different shapes?" Also, the teacher will ask, "Why or why not?"

**3.2c – Materials support multiple types of practice (e.g., guided, independent, collaborative) and include guidance for teachers and recommended structures (e.g., whole group, small group, individual) to support effective implementation.**

The grade 1 materials support multiple types of practice and include guidance for teachers, as well as a recommended structure. For example, Unit 2, Lesson 3, Activity 1 includes guided, independent, and collaborative activities that provide teacher guidance on when and how to facilitate whole-group, small-group, and individual practices.

The grade 1, Unit 3, Lesson 3 materials provide a lesson overview that includes a page called "Lesson at a Glance." This page describes each part of the lesson in brief. There are multiple types of practice included throughout various stages of the lesson to support effective implementation. For example, during the Warm-Up section and lesson activities, students work collaboratively with a partner (through instructional routines like Notice and Wonder and Think-Pair-Share) while the teacher questions, observes, and guides students through the lesson based on formative assessments. These parts of the lesson and the students' work are considered guided practice. The lesson also provides an opportunity for students to independently practice the concepts with practice pages from the "Student Edition." Based on the teacher's formative assessments, students that are ready will work collaboratively in small groups at Centers to practice and reinforce the learning. Within this same lesson, students collaborate with others in Centers by creating missing number equations. The materials include guidance in all sections of the lesson for teachers to effectively implement each aspect.

### 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.	2/2
3.3b	All criteria for guidance met.	1/1
3.3c	All criteria for guidance met.	8/8
3.3d	This guidance is not applicable to the program.	N/A
—	TOTAL	11/11

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

The grade 1 materials include a document titled "Math Language Development Resources," which contains information and guidance for teachers on providing linguistic accommodations for students at various levels of proficiency. The materials state that, "The 'Math Language Development Resources' is one part of an integrated system of lesson-level language supports, unit-level language supports, and course-level language supports." Course-level supports include documents, such as a list of English-Spanish cognates and an alignment guide for the ELPS. Unit-level supports feature tools like graphic organizers for supporting the understanding of multiple-meaning words and vocabulary cards for academic terms. Lesson-level supports include a language goal with each lesson to support math language acquisition and development. Additionally, the "Lesson at a Glance" section provides a preview of available support for students across different proficiency levels: "Pre-Production," "Beginning," "Intermediate," "High-Intermediate," and "Advanced."

Each unit of the grade 1 materials is supported by the "Math Language Development Resources" vocabulary routines. This resource includes cards with the vocabulary term and a picture of the term. A teacher script is provided with directions on how to introduce the vocabulary cards, and how to address the needs of students based on level of language proficiency. For example, in Unit 5, the materials state when "students may respond in phrases or incomplete sentences," teachers can "consider modeling using the sentence frames shown under the 'Beginning' support to restructure students' responses" for students in the "Intermediate" stage.

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

The grade 1 materials include implementation guidance to support teachers in effectively using the materials in state-approved bilingual or English as a Second Language (ESL) programs. For example, the overview of Unit 5 features a language development section that explains that every lesson includes embedded opportunities for all students to develop their mathematical language skills, engage in meaningful language interactions, and provide visual examples.

The grade 1 overview materials include the "Math Language Development Resources." In this guide, teachers are provided tools to understand the support provided within the materials. For example, teachers are given implementation guidance on "Supporting Students' Language Acquisition and Development," and "Vocabulary Routines." A list of cognates and pronunciation guides is also included.

In the grade 1 overview of Unit 2, the ELPS covered are listed on the opening page, along with a "Language Development" section that highlights "Math Language Routines" and strategies for supporting meaningful language interactions in listening, speaking, reading, and writing. Every lesson includes embedded opportunities for all students, including English learners, to develop mathematical language skills. The language goal is listed under "Key Concepts" in Lesson 1, and the "Lesson at a Glance" offers guidance on incorporating language supports for all proficiency levels. Throughout the lesson materials, teachers receive targeted suggestions for differentiating instruction. For example, in Lesson 1, Activity 1, teachers are encouraged to foster metalinguistic awareness by modeling how to craft mathematical questions and guiding students to compare and refine their own, reinforcing effective questioning strategies in the context of addition and subtraction problems.

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

The grade 1 resources provide teacher and student "Math Language Development Resources" for each lesson. For example, in Unit 2, Lesson 11, teachers develop academic vocabulary by defining the terms *addend*, *equation*, and *sum*. Teachers support comprehension through oral discourse by providing students with the "What Did Kainoa Plant?" PDF. This provides students with sentence stems and pictures to engage in academic conversations. Teachers are given questioning strategies to support students at their language proficiency level. The English/Spanish cognates for multiple terms are also included to support understanding for this lesson. A few examples of the cognates are *addend*, *decrease*, and *greatest*. Defining terms and cognates support the development of background knowledge students have to better understand the materials.

In grade 1, teachers are provided materials to support written discourse for EB students. The Frayer Model and Word Connections routines support written vocabulary acquisition. These practices increase comprehension of math terms. The Frayer Model increases comprehension for EB students defining, describing, and providing examples or non-examples. The Word Connections activity "supports students in using context to understand words with multiple meanings, connecting words to prior knowledge, and making predictions to help them deconstruct the meaning of new words." Each of these components is further explained within the document. Building these connections supports cross-linguistic learning for students at varying language acquisition levels.

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

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

## 4. Depth and Coherence of Key Concepts

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

### 4.1 Depth of Key Concepts

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

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

The grade 1 materials provide Show What You Know opportunities after each lesson. Students are given practice tasks or problems after each lesson, requiring students to use the content and process skills of the lesson's TEKS focus.

In grade 1, Unit 5, Lesson 9, students apply real-world problem solving skills to solve problems aligned to first grade TEKS: 1.1.D, and 1.2.B. These require students to use pictorial representations, numbers in standard form, and oral and written explanations of problem solving strategies. For example, students must explain how the pictorial representation and the picture in Problem 7 are equivalent.

In the grade 1, Unit 5 End-of-Unit Assessment, students are required to demonstrate knowledge of numbers in standard form and expanded form. Students must also demonstrate a depth of understanding of counting to add coins and provide a written explanation of number values.

#### **4.1b – Questions and tasks progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics TEKS.**

The grade 1 lessons include questions and tasks that begin by asking students to activate their prior knowledge with a Warm-Up activity designed to engage students. Students are then asked questions to help them process the information as it is being presented, and participate in tasks that enhance understanding and build toward grade-level proficiency through collaborative problem-solving and critical thinking. At the conclusion of the lesson, students are asked to synthesize their learning and apply it by answering questions that increase in rigor and complexity.

In grade 1, Unit 5, Sub-Unit 2, students represent numbers with objects, pictures, and expanded and standard forms. Through a progressive series of six lessons, students are introduced to 100 as a unit represented in different ways. Students move to representing numbers up to 120 using objects and drawings, then to using expanded and standard forms. The lesson progression then covers using place

value patterns to find a number 10 more and 10 less than a given number. Finally, students compose and decompose numbers up to 120.

## 4.2 Coherence of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.2a	All criteria for guidance met.	1/1
4.2b	All criteria for guidance met.	3/3
4.2c	All criteria for guidance met.	4/4
—	<b>TOTAL</b>	8/8

### 4.2a – Materials demonstrate coherence across units by explicitly connecting patterns, big ideas, and relationships between mathematical concepts.

The grade 1 "Teacher Edition" has a "Rationale of Unit Order" that connects the learning in each unit to the following unit. Each unit's contents is described, and is followed by how the lesson "builds upon their understanding" and how it is "necessary to prepare students for further work."

In the grade 1 overview of Unit 2, in the "Prior Learning" section, there is a list of knowledge and skills that students worked on in previous units in the program. For example, previously, students made connections between counting and addition and subtraction, and they represented addition and subtraction situations with expressions and equations. They will now use that knowledge to represent and solve new and familiar types of story problems using addition and subtraction within 10 and write equations to represent their thinking. These concepts will be used to further learning and knowledge in grade 1, when students will represent and solve story problems within 1–20, including problems with three addends. They will continue to develop addition and subtraction fluency within 1–10 while finding sums and differences within 1–20.

In grade 1, Unit 6, in the "Focus on the TEKS" section, there is a summary statement of the learning objectives for the unit. The lessons in this unit build on the learning from previous units. The materials state, "Students measure lengths by iterating nonstandard length units. They measure lengths up to 120 length units and practice grouping and counting the total amount of length units used by 10 and by 1. Students represent and solve a variety of story problem types with unknowns in all positions, including problems involving length, using addition and subtraction within 20, and they represent and interpret data about lengths to solve problems." In grade 2, students will use this knowledge and will be required to measure, estimate, and compare lengths using standard length units—inches, feet, centimeters, and meters.

#### **4.2b – Materials demonstrate coherence across units by connecting the content and language learned in previous courses/grade levels and what will be learned in future courses/grade levels to the content to be learned in the current course/grade level.**

The grade 1 materials demonstrate coherence across units by explicitly connecting patterns, big ideas, vocabulary, and relationships between mathematical concepts. For example, the grade 1 overview features unit overviews that connect standards to inform teachers what students are building to master.

In the grade 1 materials, each unit includes a unit overview. Within the overview, there is a page titled "Connections to Future Learning." This page outlines how the current lessons and learning connect to lessons and concepts to be learned in the future—either within the grade 1 scope and sequence or in the grade 2 units. For example, in grade 1, Unit 3, "Adding and Subtracting Within 20," the materials state, "In this unit, students develop strategies for adding and subtracting within 20, with an emphasis on making 10. In grade 2, Unit 2, they will extend their work with properties of operations and place value understanding to add numbers within 100, including composing a new 10."

At the beginning of each *Teacher Edition* of the grade 1 materials, a section titled "Connections and Coherence" is included, which features subsections titled "Prior Learning" and "Future Learning." In Unit 3, this section details the connection to learning in the prior grade level. For example, "Students composed and decomposed numbers up to 10 with objects and pictures." The materials also connect to learning within the grade level in previous units: "Students represented and solved story problems with unknowns in different positions, using addition and subtraction within 10."

#### **4.2c – Materials demonstrate coherence at the lesson level by connecting students' prior knowledge of concepts and procedures from the current and prior grade level(s) to new mathematical knowledge and skills.**

The "Connections and Coherence" section of the grade 1 lessons connect concepts of "Prior Learning" and "Future Learning" within units and lessons. The Vocabulary portion includes previously taught vocabulary that will be built upon within the new lesson. The TEKS portion highlights which TEKS are being built upon from prior and current grade levels. For example, in kindergarten, students learn to identify coins, and in grade 1, students are expected to identify coins and describe relationships. The lesson procedures are structured the same throughout grade levels and lessons to create procedural connections throughout the materials.

In grade 1, Unit 3, Lesson 2, a routine called Number Talk is used. This routine begins each lesson and is meant to "increase student collaboration and leverage student ideas during lessons." The Number Talk routine is first introduced in the beginning lessons of Unit 1, and then continually implemented and practiced throughout all units thereafter.



In grade 1, Unit 6, Lesson 12, the materials are coherent at the lesson level as students' prior knowledge of concepts from the current grade level are applied to the new knowledge and skills being learned in the current lesson. For example, in Lesson 12, students "read and discuss a variety of story problems with unknowns in all positions. They decide if addition, subtraction, or both could be used to represent the story problem by reasoning about the relationships between the amounts using familiar representations." In previous lessons in Unit 4, students write and solve subtraction problems, noticing that although the story problems describe an amount being taken away, addition can also be used to solve those problems.

## 4.3 Coherence and Variety of Practice

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

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

In grade 1, a "Spiral Review" is included at the end of lessons in worksheet form, which provides students with retrieval opportunities throughout units and lessons. For example, in Unit 4, Lesson 3, "Numbers to 99 and Financial Literacy," reviews graphing and adding and subtracting within 10, while Lesson 15 reviews graphs and balanced equations.

In grade 1, Unit 4, Sub-Unit 1, students are provided opportunities to use previously learned skills and concepts from Units 1–3 in order to add numbers up to 10. For example, in Lesson 4, as the lesson is launched, students complete a Warm-Up activity to develop fluency by looking at and describing the different ways they see the total amount of cubes in base-ten representations of multiples of 10. In Lesson 4, then, students find 10 more and 10 less than multiples of 10 within 100.

In grade 1, Unit 4, students are given the opportunity for spaced retrieval of concepts across lessons and units. For example, in Unit 4, Lesson 2, students must apply knowledge from Unit 3 that "a 10 is a unit made up of 10 ones." Applying these previously taught concepts allows for spaced retrieval opportunities with previously learned skills.

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

In grade 1, the materials include interleaved practice opportunities throughout the program, providing students a chance to practice previously learned skills and concepts. For example, in Unit 6, Lesson 2, the materials include independent practice of the current skill being taught. Included in the independent practice are problems for students to solve that require learning from previous units. In this example, the "Spiral Review" includes addition and subtraction problems requiring the use of previously taught strategies.

In the grade 1, Unit 2 Lesson 6, "Practice" section, students are able to "build and reinforce their conceptual understanding, fluency and application of mathematical topics." Students are able to switch between different processes, such as adding and subtracting within word problems, counting base-ten, and shapes, creating interleaved practice across units and lessons.

Each grade 1 unit offers center ideas for students to practice skills and concepts learned in current lessons, or prior lessons, units, or grade levels. For example, Unit 1 center ideas include "Counting Collections, Up to 20," which is introduced in kindergarten and used in Lessons 4, 5, 7, 9, and 10 of grade 1, Unit 1.

## 5. Balance of Conceptual and Procedural Understanding

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

### 5.1 Development of Conceptual Understanding

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

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

In grade 1, Unit 6, Lesson 1, the materials include an activity titled "Bird Wingspans" in which the student objective is to "interpret given information and apply their prior knowledge of measurable attributes to explore linear measurement and find objects that are the same length as a given measurement." Unit 6 is about numbers 0–120. Lesson 1 is an exploratory and anticipatory lesson about measurement of length. Students are given a ribbon representative of a bird's wingspan. Their task is to find objects in their classroom that have the same length as their ribbon. As the lesson progresses, students are asked to use the Mix and Mingle routine to share with their peers what they found that was the same length as their ribbon and to explain how they know it is the same length. Through the questioning, tasks, and sharing of results of this lesson, students are interpreting, analyzing, and evaluating their own measurements and that of their peers.

In grade 1, Unit 5, Lesson 10, Activity 1, "What's the Number?" students create a representation of a number, up to 120, in two ways using different amounts of hundreds, tens, and ones. Students will then trade with another pair of students to interpret their representations. Using the Think-Pair-Share routine, students will analyze the representations for commonalities and differences. They will discuss the need to look for all possible groups of 10 when identifying and representing a number.

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

The grade 1 materials include questions and tasks that require students to create models to represent mathematical situations. For example, Unit 6, Lesson 11, Activity 1 requires students to solve three different types of story problems using pictorial models and discuss how story problems could be represented in different ways and with different equations used to solve.

In grade 1, Unit 7, Lesson 12, Activity 2, students learn about reading and writing time to the hour on analog and digital clocks. In this activity, students will create representations of analog clocks with the hour hands drawn in to connect the times shown on analog clocks with times shown on digital clocks.

In grade 1, Unit 6, Lesson 9, students create models to represent a missing number equation. Students represent the numbers in word problems with pictures. The grade 1, Unit 6, Lesson 9 center resource instructs students to break apart ten connecting cubes to create a missing addend equation. For example, one partner breaks ten counting cubes into four and six. The student keeps four cubes hidden and writes  $6 + \underline{\quad} = 10$ . The partner must solve to figure out how many cubes are hidden and explain their answer.

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

The online activities throughout the grade 1 lessons provide multiple opportunities for conceptual understanding of concepts through questioning and tasks. For example, in Unit 4, Lesson 8, "students receive real-time feedback to help make connections between different types of base-ten representations" while using the student paired lesson screens. Students will have multiple opportunities within the lesson to practice representing base-ten to understand the "meanings of the digits in two-digit numbers."

The grade 1 materials include questions and tasks that provide opportunities for students to apply conceptual understanding to new problem situations and contexts. For example, Unit 5, Lesson 5 includes a "Prior Learning" and "Future Learning" connection. "Prior Learning": In Lesson 4, students used skip counting to determine the value of 100 cents in a collection of different coins. "Future Learning": In Lesson 6, students will represent three-digit numbers up to 120 as different amounts of hundreds, tens, and ones.

In grade 1, Unit 6, Lesson 12, students apply their conceptual understanding of data representations and addition and subtraction to generate and solve real-world story problems within 20. Students ask questions of the data and write story problems to represent a given addition or subtraction equation. Students answer their own question and solve their own story problem using a representation that they create. For example, students create a pictorial model or an equation including an unknown amount to apply conceptual understanding.

## 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 tasks.

The grade 1 materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level tasks. For example, Unit 7, Lesson 2 features a "Spiral Review" that focuses on building student fluency.

The grade 1 materials include a section called "Fluency Practice," accessible via the online platform. This consists of an activity called "Numbers by Heart." The online activity provides "daily personalized fluency practice on math facts." It is recommended that teachers "Incorporate Fluency Practice into the daily routine for 5 to 10 minutes."

The grade 1 overview of Unit 4 includes "Fluency Practice," accessible via the online platform. The materials provide an activity titled "Addition and Subtraction by Heart I," which is a flashcard activity focusing on addition and subtraction within 10. Representations used include dot diagrams, ten-frames, number bars, and number paths. The materials provide a summary of the fluency activity stating, "Using the theory of spaced repetition, students more frequently practice the facts they are most likely to forget. When students correctly answer a fact, they will not see that same fact again for one to two days to a few weeks, depending upon how many times they have already correctly answered that fact. If students answer a fact incorrectly, they will see that fact again the next time they practice." This activity is digital and personalized to individual student needs.

### 5.2b – Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within the lesson and/or throughout a unit.

In grade 1, Unit 4, students relate counting to addition and subtraction and represent and solve "Add To, Result Unknown," and "Take From, Result Unknown" story problems within 10. Students represent story problems and drawings with expressions and determine the values of given expressions.

In grade 1, Unit 6, Lesson 11, students solve story problems involving addition and subtraction. In Lesson 11, students build on their understanding that story problems can be represented in different ways and

often with more than one equation. The materials state, "Students then find the unknown numbers in a variety of addition and subtraction equations with unknowns in all positions. This provides an opportunity for students to consider the relationship between the known numbers and think about whether there are different ways to find the unknown number."

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

The materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within the lesson and/or throughout a unit. The grade 1 materials provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson and throughout a unit. For example, in Unit 1, students collect, sort, and organize up to three categories of data using tally charts and represent the data with picture graphs and bar-type graphs. Students explore how counting relates to addition and subtraction and investigate patterns when adding and subtracting one and two. Students represent addition and subtraction within 10, both in and out of context, using equations. Students also use addition to interpret data representations and consider the limitations of data.

The grade 1 materials provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson. For example, in Unit 5, Lesson 13, during the "Monitor" part of Activity 1, students are asked, "How could you use what you know about the number of tens and ones in each number to find the smallest number?" During the connection portion of the lesson, students use a Think-Pair-Share routine and are asked to respond to the following: "How is using an open number line to order numbers similar to other work you have done with ordering numbers? How is using an open number line to order numbers different from other work you have done with ordering numbers?" In the Synthesis portion of the lesson, students are also tasked with placing a number on an open number line. This requires students to evaluate the procedures for placing a number on an open number line, as well as the solution obtained for accuracy and efficiency.

### **5.2d – Materials contain embedded supports for teachers to guide students toward increasingly efficient approaches.**

In grade 1, Unit 4, Lesson 17, teachers are provided guidance for increasingly efficient student performance. In the "Monitor" section, there are embedded questions, such as, "What do you need to do?" and "What is the purchase in this problem?"

The "Connect" section of grade 1, Unit 6, Lesson 6 gives teachers the guidance to provide students with efficient approaches by explicitly teaching them that "using tens rods is faster than using single unit cubes." Students are asked to share strategies for how they are measured. The teacher then reviews this concept in the "Key Takeaway" portion of the lesson.

In grade 1, Unit 5, Lesson 8, students identify numbers 10 more or 10 less than a given number up to 120. The lesson focuses on identifying and using patterns in the numerals to identify 10 more or 10 less without counting. Throughout the lesson, the materials include embedded support for teachers to assist in guiding students toward increasingly efficient approaches. As students work on completing the first task of Lesson 8, the materials include a "Differentiation/Teacher Moves" chart for a teacher to refer to with questions to ask students for the purpose of supporting, strengthening, or stretching student knowledge and skill level depending on teacher observation of student performance. For students who have a difficult time getting started with the task, the materials include questions embedded within the lesson structure for a teacher to ask. For example, "How can patterns in place value help you find 10 more? 10 less?" and "What do you already know about finding 10 more? 10 less?"



## 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
—	<b>TOTAL</b>	11/11

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

The grade 1 materials explicitly state how the conceptual emphasis of the TEKS is addressed. For example, Unit 4, Lesson 1 addresses the concept standard of 1.2.C, which states, "Use objects, pictures, and expanded and standard forms to represent numbers up to 120." In the "Key Concepts" section of the lesson overview states, "The Exploration provides an opportunity for students to explore different ways to use their understanding of counting to organize and keep track of quantities greater than 20 and find a total amount that increases in increments of 5 or 10."

In grade 1, lessons connect conceptual understanding to the support of procedural understanding. This can be found in Unit 7, Lessons 13–15. For example, in the "Integrating Rigor in Student Thinking" section of Lesson 14, it states that "Students build their conceptual understanding of the role of the minute hand and its relationship to the hour hand on an analog clock. Students strengthen their procedural skills in telling and writing time to the hour and half hour." This directly supports the TEKS 1.7.E.

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

In the grade 1 materials, questions and tasks include concrete, pictorial, and abstract forms. For example, in Unit 2, Lesson 14, and Unit 5, Lesson 12, students use manipulatives, visual models, and symbolic notation to reinforce math concepts. In Unit 5, Lesson 6, students read numbers in standard form, represent them using place value blocks (concrete), and then draw the representation (pictorial). In Unit 3, Lesson 4, students match abstract equations and can choose to use pictorial models to support their reasoning, ensuring access to concepts through varied representations.

In grade 1, Unit 7, Sub-Unit 3, Lessons 12–16, the materials move from concrete to abstract representations as students learn to tell and write time. Early lessons focus on reading analog clocks to the hour and half-hour using clock models and manipulatives. As students' understanding grows, later lessons introduce more abstract tasks, such as interpreting and writing time clues involving both analog and digital clocks. This structured progression supports students in developing both conceptual and procedural fluency with time.

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

The grade 1 materials include support for students in "connecting, creating, defining, and explaining concrete and representational models to abstract concepts." For example, in Unit 1, "students collect, sort, and organize up to three categories of data using tally charts and represent the data with picture graphs and bar-type graphs." In this same unit, they also "explore how counting relates to addition and subtraction and investigate patterns when adding and subtracting 1 and 2." The materials give students hands-on and visual ways to make sense of number relationships before transitioning to symbolic operations, supporting the development of abstract mathematical thinking.

The grade 1 materials include embedded guidance for teachers that supports students in "connecting, creating, defining, and explaining concrete and representational models to the abstract concepts they represent." The "Facilitating Lesson Activities" section in the overview explains the "Launch-Monitor-Connect" structure, stating, "Students are first invited to explore problems that create an intellectual need for new mathematical ideas. Then the teacher builds on strategies used by students and connects their ideas to the learning goals of the lesson." This structure is designed to help students build meaning through exploration and discussion. For example, in Unit 4, Lesson 7, Activity 2, "students are given a task to work on. Initially, students work independently, but after marking their responses to the task's directives, students meet with a partner to discuss their responses as well as explain and justify their thinking." The *Teacher Edition* includes prompts and strategies to help guide students in connecting their representations to more abstract mathematical ideas.

## 5.4 Development of Academic Mathematical Language

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.4a	All criteria for guidance met.	3/3
5.4b	All criteria for guidance met.	1/1
5.4c	All criteria for guidance met.	6/6
—	<b>TOTAL</b>	10/10

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

The grade 1 materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, or other language development strategies. For example, in Unit 6, Lesson 2, the "Teacher Overview" identifies both new and review vocabulary for the lesson, including the contextual term "length." During the lesson, the teacher presents a problem using the whiteboard (visual), introduces the term "length," and guides students in measuring objects with string (manipulative). Students share responses using oral language, hand gestures, or linking cubes, providing multiple access points for language expression. During the Synthesis portion of the lesson, the teacher formalizes the new vocabulary using a Frayer Model.

The grade 1 materials incorporate language development strategies, such as guided visualization, acting out, and peer discussion to help students build mathematical vocabulary. In Unit 3, Lesson 7, Activity 2, students "represent and solve Add To, Start Unknown story problems to consider different strategies for finding an unknown starting amount." The materials recommend, "Guide visualization and offer students choice in how they represent and solve the problems, acting out the situations, drawing pictures, or using math tools."

In grade 1, Unit 6, Lesson 10, students "use visuals and manipulatives to develop mathematical language" while solving and discussing story problems. For example, students are prompted to "tell your partner if each story problem can be represented with addition, subtraction, or both. Explain your thinking." This approach allows students to practice using academic vocabulary in context through partner talk and structured reasoning.

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

The grade 1 materials include embedded teacher guidance that supports the development and contextual use of academic mathematical vocabulary. For example, in Unit 2, Lesson 12, the vocabulary word *equal* is introduced and reinforced through hands-on activities using connecting cubes, helping students build meaning through action and language. The "Key Takeaway" states that students "could add or subtract to make the number of objects in two groups equal," providing a clear academic use of

the term. These embedded practices support students in using mathematical vocabulary accurately while communicating with peers and educators.

In Unit 6, Lesson 2, the teacher is prompted to introduce the new vocabulary word *length* in context. The introduction includes, "The vehicles are illustrations from Sean and Trevor's library book. The line below each vehicle represents its length, or how long it is." Later in the Synthesis portion, the materials guide the teacher to reinforce meaning, "measuring length using a length unit can be helpful because it tells an exact measurement of an object's length." Teachers are also encouraged to use vocabulary tools like the Frayer Model to deepen student understanding of new terms.

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

In grade 1, Unit 4, Lesson 12, teacher guidance supports the development of vocabulary and syntax during mathematical discussions. Students compare two-digit numbers using vocabulary terms, such as *conjecture*, *digit*, *greater than*, and *less than*. Teachers are prompted to ask, "What conjectures can you make about comparing two two-digit numbers?" and are given exemplar student responses, such as, "All the numbers that are greater have more tens than the numbers that are less."

In grade 1, Unit 5, Lesson 13, materials guide teachers in supporting students' use of academic language with appropriate syntax and discourse throughout the lesson. Teachers are encouraged to first allow students to explain their reasoning in their own words, then model mathematical terms with proper syntax during whole group discussion. The lesson includes routines like Notice and Wonder and Compare and Connect, along with a "Differentiation/Teacher Moves" section that offers exemplary responses and prompts to help teachers support student thinking and language development effectively.

## 5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	All criteria for guidance met.	2/2
5.5c	All criteria for guidance met.	2/2
5.5d	All criteria for guidance met.	1/1
—	<b>TOTAL</b>	6/6

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

At the start of each grade 1 unit, the *Teacher Edition* outlines the standards addressed, clearly distinguishing between "Addressing Standards" and "Process Standards." Each unit also features a "Spotlight on Connecting the Content and Process Standards" section, which includes a subsection titled "Students engage in these Mathematical Process Standards as they...". This subsection explicitly links each process standard to relevant lesson content within the unit. In Unit 7, the Mathematical Process Standards addressed include 1.1.A, 1.1.B, 1.1.C, 1.1.D, 1.1.E, 1.1.F, and 1.1.G. For example, in Lesson 7, Activity 2, 1.1.D is addressed as students describe the defining attributes of three-dimensional shapes to identify solids, such as spheres, cones, cubes, and cylinders. In Lesson 12, Activity 1, 1.1.F is addressed as students analyze times shown on analog and digital clocks to identify similarities and differences between the two formats.

The grade 1 process standard 1.1.F is embedded in Unit 5, Lesson 4, through Activity 1 and Activity 2. In these tasks, students are required to analyze mathematical relationships to connect and communicate their ideas by representing coin values and discussing their solutions with a partner who may have selected a different coin combination. Additionally, students must demonstrate two different ways to make 100¢ using only nickels and dimes, reinforcing the skill of representing values in multiple valid ways.

The "Item Analysis" for the grade 1, Unit 6 End-of-Unit Assessment identifies how the process standards are integrated into the materials. For example, 1.1.C is addressed in Problems 2, 4, 7, and 8. Students must "select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems."

### 5.5b – Materials include a description of how TEKS process standards are incorporated and connected throughout the course.

In the grade 1 overview, the "Texas Essential Knowledge and Skills (TEKS) Grade 1" section lists each process standard along with the specific units and lessons in which it is addressed. For example, process standard 1.1.D is integrated across multiple units and lessons, including: Unit 1, Lessons 1, 3–6, 8–11, 14–

16; Unit 2, Lessons 3, 7–10, 12, 17, 19; Unit 3, Lessons 2, 4, 6, 7, 10–12, 14, 15, 18, 19; Unit 4, Lessons 2–4, 12–15, 17; Unit 5, Lessons, 2, 4, 5, 7–9, 11, 13; Unit 6, Lessons 1, 5, 8, 11; and Unit 7, Lessons 3, 6–10, 13.

The *Grade 1 Teacher Edition Overview* includes a breakdown of each lesson within each unit, and the standards covered. The overview informs teachers of when a process standard is building toward a specific content standard. For example, in Unit 2, Lesson 1, 1.1.A, 1.1.B, and 1.1.G, build toward 1.3.B, while in Unit 5, Lesson 1, 1.1.A, 1.1.B, 1.1.E, and 1.1.F build toward 1.4.C.

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

Each unit in the grade 1 materials includes a *Teacher Edition* that details the integration of process standards within the unit's "Unit at a Glance" section. Units are organized into sub-units and lessons, with the corresponding process standards listed. For example, in Unit 1, the process standard 1.1.E (create and use representations to organize, record, and communicate mathematical ideas) is being taught in Lessons 2, 3, 4, 5, and 14.

Each unit in the grade 1 materials includes the "Connections and Coherence" section. In the "Connections" portion, it states how each of the process standards connect to the material being taught. For example, in Unit 2, Lesson 10, Activities 1 and 2, the materials state that students will engage in the process standard 1.1.B by representing and solving "Put Together/Take Apart," "One Addend Unknown," and "Total Unknown" story problems and then participate in a Gallery Tour to match story problems and representations.

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

The grade 1 materials include an overview of the TEKS process standards incorporated into each lesson. For example, in Unit 4, Lesson 2, two process standards are addressed. There is an explanation for teachers in the "Connections and Coherence" section regarding how one of the standards is addressed in the lesson, while the "Lesson at a Glance" section provides a summary of the second process standard.

In the grade 1 resources, each lesson begins with an overview page that states the process standards covered within that lesson. For example, in Unit 3, Lesson 12, the process standards 1.1.E and 1.1.F are included. In the "Connections and Coherence" section, the materials state that "students solve story problems to explore making 10 when adding within 20. They recognize that when adding two one-digit numbers in which 10 can be made, either addend can be decomposed." By engaging with this strategy in context, students learn to decontextualize the problem and use mathematical structure to decompose and compose numbers.

The grade 1 online overview for each lesson lists the process standards practiced within it. For example, Unit 4, Lesson 5 includes 1.1.E and 1.1.F. Teachers can hover over each standard in the digital platform to preview the associated skills and expectations.

## 6. Productive Struggle

Materials support students in applying disciplinary practices to productive problem-solving, including explaining and revising their thinking.

### 6.1 Student Self-Efficacy

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.1a	All criteria for guidance met.	3/3
6.1b	All criteria for guidance met.	6/6
6.1c	All criteria for guidance met.	3/3
—	<b>TOTAL</b>	12/12

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

The grade 1 materials provide numerous opportunities for students to think mathematically, persevere through problem-solving, and make sense of math concepts. For example, in Unit 5, Lesson 11, students compare numbers up to 120 by interpreting amounts of hundreds, tens, and ones. The "Connections and Coherence" section explains that students apply their understanding of place value and number structure as they compose and decompose numbers, notice patterns, and use repeated reasoning to compare representations using comparative language.

At the end of each grade 1 activity, the "Differentiation/Teacher Moves" section helps teachers identify student strategies and tailor support to either reinforce or extend understanding. Lessons conclude with a Synthesis segment where the teacher leads the whole class in reviewing and connecting the lesson's concepts, addressing misunderstandings, and helping students see how their learning applies to real-world problems and fits within broader mathematical ideas.

In Unit 5, Lesson 4, of the grade 1 materials, students discuss and respond to open-ended questions related to Problems 4 and 6. Students explain their reasoning for counting a set of coins and articulate whether they agree or disagree with a story problem, providing justification. In this lesson, students make sense of their work and deepen their understanding by explaining both their own and others' thinking.

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

The grade 1 materials support students in understanding and explaining that problems can be represented and solved in multiple ways. In Unit 2, Lesson 1, the focus is on connecting literacy and mathematics by asking and answering questions about the unit story. The "Key Concepts" section of the *Teacher Edition* states the lesson's goal is to "ask and answer mathematical questions about stories and illustrations." During Activity 1, students work in small groups to participate in a Gallery Tour, where they



select one or two questions from each group's work to discuss and answer. The lesson ends with a whole-class discussion, where groups compare and contrast their responses with those of their peers.

In grade 1, Unit 4, Lesson 4, students explore finding 10 more and 10 less than a given number. The "Connections and Coherence" section explains that students solve story problems involving towers of cubes to develop strategies for determining 10 more or 10 less than multiples of 10 within 100. Through the lesson tasks, students explain their problem-solving approaches to partners, peers, or the class, compare and contrast responses, and justify their solutions, recognizing that different strategies can effectively represent and solve the problem.

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

The grade 1 materials provide multiple opportunities for students to make sense of mathematics by doing math, writing about math, and discussing math with peers and teachers. In the "Connections and Coherence" section of Unit 5, Lesson 13, the lesson focuses on students comparing and ordering two- and three-digit numbers using place value strategies, then using an open number line to order numbers and explain their reasoning. Throughout the lesson, students collect data, place numbers on an open number line, and discuss their thinking with partners using Think-Pair-Share and Notice and Wonder routines. The lesson concludes with a Show What You Know activity where students write about their mathematical understanding.

In Unit 7 of the grade 1 materials, students have multiple opportunities to work and discuss math with partners. For example, in Lesson 3, students explore the attributes of two-dimensional shapes and describe both their own shape and their partner's. Additionally, the "End-of-Unit: Watch Your Knowledge Grow" activity encourages students to pair up to discuss their learning progress and any remaining questions.

## 6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	All criteria for guidance met.	6/6
6.2b	All criteria for guidance met.	4/4
—	TOTAL	10/10

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

The grade 1 materials support teachers in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications. In Unit 4, Lesson 7, the lesson begins with a whole-group Warm-Up where the teacher presents a problem or question and uses prompts from the materials to engage student thinking. Throughout the lesson, students share their explanations and justifications with partners, small groups, the whole class, or the teacher. In Activity 2, students use the Think-Pair-Share routine to explain and justify their answers to a partner. The materials also provide guidance for teachers on what to listen for in student responses and offer questions to further prompt student thinking.

In grade 1, Unit 6, Lesson 3, the "Warm-Up: Launch" guides teachers to ask students, "About how long do you think the toy box is if measured using connecting cubes?" Students share their estimates with the class. Later, in the "Connect" portion, students construct viable arguments to support their estimates, encouraging both sharing and self-reflection through classroom discussion.

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

The grade 1 materials include prompts to support teachers in providing explanatory feedback based on student responses. In Unit 3, Lesson 4, students are making connections between addition and subtraction. At the end of the lesson, the "Differentiation/Teacher Moves" chart guides teachers in recognizing student responses and offers prompts to support, strengthen, or extend mathematical thinking and problem-solving. For example, the chart at the end of Activity 1 guides teachers to look for students who explain how the addition equation helps to find the difference using the relationship between addition and subtraction. The chart provides an example of what a student might say in response to the task. The materials include a prompt for teachers to stretch students' thinking by asking, "What other related subtraction equation could you write using the same three values?"

Each grade 1 lesson includes a "Monitor" section within both Activity 1 and Activity 2 that offers teachers questioning prompts and guidance to address common student misconceptions. These prompts align with the strategies outlined in the "Differentiation/Teacher Moves" section. For example, in Unit 5, Lesson 10, Activity 1, teachers supporting students who struggle might ask, "What is one way to represent the

hundreds, tens, and ones in this number?" and "What is another way you can show one of the tens in this number?" These questions help guide student thinking and build understanding.