Amplify Education, Inc.

English Mathematics, 2

Amplify Desmos Math Texas G2 Student Blended Package

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Full-Subject, Tier-1	**9798895806777**	**Both Print and Digital**	**Static**

Rating Overview

TEKS SCORE	ELPS SCORE	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	100%	16	Flags Not in Report	Flags in Report	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	28 out of 28	100%
2. Progress Monitoring	26 out of 26	100%
3. Supports for All Learners	27 out of 27	100%
4. Depth and Coherence of Key Concepts	19 out of 19	100%
5. Balance of Conceptual and Procedural Understanding	41 out of 41	100%
6. Productive Struggle	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	20
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
—	**TOTAL**	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 2; 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 2.

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 2 *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 2 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 2 "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.

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 math, 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 that 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 the 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 2, Unit 3 *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 represented and solved addition and subtraction story problems within 100 with unknowns in all positions."

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 2 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 and academic vocabulary being taught in the unit and the academic vocabulary necessary for comprehension.

The "Caregiver Hub" in the online resources is available in both English or 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 2 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 2 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 2 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 2 "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 2 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 2 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 2 "Extensions," found in the online platform, there is an option for each lesson within the unit to extend learning. For example, clicking on "Measuring Within Standard Units," teachers are able to view a teacher and student resource. The teacher resource gives problems to work through with students, and the student resource is a worksheet for students to engage in independent practice.

The grade 2 "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
—	**TOTAL**	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.

The grade 2 "Assessment Resources Overview" details the formative, diagnostic, and summative assessments in the grade 2 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." The materials include unit-level assessments, including a Pre-Unit Check, Sub-Unit Quizzes, and an End-of-Unit Assessment. There are also moments for assessment within each lesson. "Digital lessons offer moments of assessment and provide valuable information for both the teacher and students." There is an end-of-lesson assessment in the Show What You Know section, where students can complete a formative assessment for teacher data collection.

Each unit in grade 2 is equipped with a Pre-Unit Check. Students can complete this in digital or paper form. Questions are posed in multiple choice or with an illustration of the answer. This assesses students' prior knowledge and offers differentiation to strengthen students' learning. Additionally, each unit in the grade 2 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.

In each grade 2 unit, the materials include an End-of-Unit Assessment offered in both paper and digital form. For example, Unit 4 offers different question types (multiple choice and fill in the blank) and assesses multiple types of tasks (i.e., finding a number on the number line, base-ten representation, and comparative equations).

In grade 2, Unit 2, Lesson 4, the formative assessment is done throughout the beginning of the lesson. For example, the teacher uses the Think-Pair-Share routine to assess student understanding of the current problems they are working on. Students then have the opportunity to complete summative assessments at the end of each lesson through a series of problems independently.

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

The grade 2 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 2 "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 2 Teacher Edition Overview* defines the types of assessment materials included in the curriculum.

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

The grade 2 materials include teacher support designed to guarantee the reliable and precise administration of summative instructional assessments. This is illustrated through an End-of-Unit 4 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 2 materials include a Pre-Unit Check, which allows teachers to "learn more about students' understanding of foundational concepts and skills that will support them." In the grade 2 materials, this component is included in both physical student resources and can also be administered digitally. 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."

The grade 2 materials include an "Assess and Respond" page in the *Teacher Edition*, which includes teacher guidance for each unit's Sub-Unit Quizzes. For example, "Assign this Sub-Unit Quiz at the end of

Sub-Unit 1 to evaluate students' proficiency with the key concepts and skills addressed in this sub-unit." The assessment can be administered in both paper and digital form.

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

In the grade 2 materials, formative and summative TEKS and objectives are outlined within each lesson and unit. For example, Unit 6 has 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 2 "Teacher Edition" under "Key Concepts."

The grade 2 materials incorporate formative assessments that are consistent with the TEKS and the objectives of the unit. This alignment is evidenced in the "Warm-Up," activities, and formative assessment sections found in the *Teacher Edition* of Unit 3, Lesson 10. For example, in the Unit 3, Lesson 10 "Warm-Up," students notice and wonder about a broken ruler. In the activities, "Students measure the lengths of caterpillars at a point other than 0." Last, in the Show What You Know section, "students demonstrate their understanding by finding the length of a caterpillar from a starting point other than 0."

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

The grade 2 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 2, Unit 3 End-of-Unit Assessment has varying levels of complexity when demonstrating knowledge. Students are expected to fill in the blank, select multiple choice, demonstrate thinking, and write explanations of answers.

In the grade 2, Unit 6 End-of-Unit Assessment, students solve additional problems using standard algorithms, and have multiple opportunities to show or explain thinking in which students can use pictorial or written explanations. The End-of-Unit Assessment also contains an "Extended Response" where students must write a story problem and solve it correctly.

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 2 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 2 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 2 End-of-Unit Assessment rubric for Unit 7, Form A, includes scoring information along with examples of answers and levels of understanding. For example, students who score 3 (Approaching) on Number 5 may have written "even, but have a minor error in their equation and may need support in writing equations that represent equal groups."

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

The grade 2 "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. One example of a suggested grade 2 mini lesson is "Composing a Ten and a Hundred When Adding Within 1,000."

The grade 2 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 2 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 2, 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 2, 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 2 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 2 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 2 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 2, Unit 6, Lesson 5, the mini-lesson on composing a hundred when adding within 1,000 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 2 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 Representing Comparisons on a Number Line" mini-lesson. There is also a paired worksheet to review the skills taught in the mini-lesson.

The grade 2 materials include teacher guidance for differentiated instruction, as well as activities and paired lessons for students. For example, Unit 2, Lesson 12 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 2 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 2 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 5, Activity 2, in the Synthesis portion of the lesson, the vocabulary word *add* is defined. Students are asked to use the Total Physical Response routine and create different motions that could represent *add*.

The grade 2 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 2, Unit 3 materials include lesson support for teaching the singular and plural forms of *centimeter*, *foot*, *inch*, and *meter*, as well as vocabulary words *meter stick* and *ruler*. Students then use the vocabulary appropriately in mathematical context when speaking to a partner about measurement of length.

The grade 2 materials include pre-teaching or embedded supports for vocabulary and text references. For example, the overview of grade 2, Unit 2 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.

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 2 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 2, Unit 5, Sub-Unit 2, students have been working with halves, fourths, and eighths. The extension activity for this sub-unit has two problems, which allow students to extend their understanding of partitioning shapes into equal parts.

The grade 2 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. Unlike simple, repetitive math games, students "through various levels with supportive feedback along the way." For example, in grade 2, Unit 6, the "Math Adventures" digital activity is titled "Formula Won," where students play a racing game trying to "advance around different game board race tracks, competing against an AI opponent by picking sets of number cards and operations. Requires players to operate with integers, mixed numbers, or decimals. Players will unlock new tracks by beating their opponent and earning stars."

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
—	**TOTAL**	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 2 *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 concludes with 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 responses and strategies for Problem 2." The teacher selects and sequences their responses in the order shown in the Differentiation table. The teacher is provided guidance to explain the concept based on student responses. Questions include, "Where do you see five sides in your new shape? Where do you see five vertices in your new shape?"

The lesson materials for grade 2, 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 "create a pentagon using two shapes that represent the given attributes or properties." 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, "How can you prove that three shapes were used to make Diego's pentagon?"

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

In the grade 2 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 2 lessons. For example, Unit 7, Lesson 3 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 7, Lesson 2, 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 2, Unit 5, Lesson 2 uses the instructional approach of Think-Pair-Share. This approach has students reflect on their activity, with the teacher asking questions, such as, "What questions could my partner ask to figure out the mystery shape?" After discussion, the teacher continues to explain the activity to correct any misconceptions.

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 2 materials support multiple types of practice and include guidance for teachers, as well as a recommended structure. For example, Unit 2, Lesson 11, 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 2, Unit 5, Lesson 8 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 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 What Do You Know About ___? 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 lesson 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.

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 2 materials include a document titled "Math Language Development Resources," which contains information and guidance for teachers on providing linguistic accommodations for students with 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 include 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 students' access to math language acquisition and development. Also included in 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 2 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 7, the materials state if "students may respond in simple, complete sentences," teachers can "invite students to share their responses with a partner" for students in the "High-Intermediate" stage.

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

The grade 2 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 2 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 are also included.

The grade 2 materials provide clear support for implementing instruction in bilingual or ESL settings. The grade 2, Volume 1, Units 1–4 *Teacher Edition* includes a section called "Proficiency-leveled ELPS Support," which offers strategies like visuals, sentence frames, word banks, and graphic organizers. The "Math Language Development Resources" document states that "each page provides ELPS-proficiency-leveled support." The "More Language Support" section summarizes available vocabulary tools and highlights lesson, unit, and course level supports. In the overview of Unit 2, the ELPS are listed on the first page, and the "Language Development" section describes how each lesson offers opportunities for all students, including English learners, to build math language through meaningful interactions.

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 2 resources provide teacher and student "Math Language Development Resources" for each lesson. For example, in Unit 2, Lesson 14, teachers develop academic vocabulary by defining the term *digit*. Teachers support comprehension through oral discourse by providing students with the "Choosing Your Method" PDF. This provides students with sentence stems 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 *base-ten blocks*, *decompose*, and *digits*. Defining terms and cognates support the development of background knowledge students have to better understand the materials.

In grade 2, 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 2 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 2, Unit 6, Lesson 5, students engage in different complexities of practice of real-world problems involving TEKS 2.1.G and 2.4.B. Students are expected to solve three-digit addition problems using concrete manipulatives, pictorial representations, standard algorithms, and communicate verbal expressions of thinking. For example, students must explain how solving Problems 1 and 2 were the same and different when finding the value of the expressions using manipulatives.

In the grade 2, Unit 6 End-of-Unit Assessment, students are required to demonstrate a depth of understanding by solving additional problems using standard algorithms, and multiple opportunities to show or explain thinking in which students can use pictorial or written explanations.

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

The grade 2 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 2, Unit 1, Sub-Unit 4, the unit overview states, "Students explore concepts, such as deposits and withdrawals, responsible and irresponsible borrowing, and the benefits and costs of lending decisions." Through a progressive series of four lessons, students learn about deposits and withdrawals using bar

graph data, distinguish between responsible and irresponsible borrowing, evaluate the benefits and costs of lending decisions, and apply these concepts to real-world situations.

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
—	**TOTAL**	8/8

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

The grade 2 "Teacher Edition" includes a "Rationale of Unit Order" that connects the learning in each unit to the following unit. Each unit's contents are described, and followed by how the lesson "builds upon their understanding" and how it is "necessary to prepare students for further work."

In grade 2 overview of Unit 2.1, the materials include information on "how the content in this unit connects to where your students are headed in their math journeys" within the unit. For example, it states that in Unit 1, "students build on their fluency with addition and subtraction within 10." This prepares students for Unit 2, in which "students apply this understanding to add and subtract within 100, which requires composing and decomposing a 10."

In grade 2, Unit 6, in the "Focus on the TEKS" section, the materials include 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 use place value understanding to add and subtract within 1,000, with and without composing and decomposing hundreds and tens. They also explore and compare other strategies, such as counting on, counting up or back, decomposing to make a ten or a hundred, and compensating. Students also use different algorithms, such as partial sums algorithms, expanded form algorithms, and standard algorithms, to add and subtract numbers within 1,000." In grade 3, students will solve two-step story problems involving multiplication. In grade 4, students will add and subtract multi-digit numbers within 1,000,000 using the standard algorithm.

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 2 materials demonstrate coherence across units by explicitly connecting patterns, big ideas, vocabulary, and relationships between mathematical concepts. For example, the grade 2 overview features unit overviews that connect standards to inform teachers what students are building to master.

In the grade 2 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 2 scope and sequence or in the grade 3 and 4 units. For example, in grade 2, Unit 3, "Measuring and Solving Problems Using Length," the materials state, "In this unit, students work with length in whole number units. In grade 3, Unit 4, they understand fractions as numbers and represent them on a number line."

The "Coherence" section of the grade 2, Unit 3 materials connects "Prior Learning" from grade 1, such as "Students measured and described the lengths of objects to the nearest whole unit using measuring tools." This will support the current learning in grade 2. There are also examples of how this content supports "Future Learning" in grade 3, such as building an "understanding of measurement to estimate, measure, and determine liquid volume or weight using the appropriate units and tools."

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 grade 2, Unit 1, Lesson 9 connects 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, along with the new vocabulary. The TEKS portion highlights which TEKS are being built upon from prior and current grade levels. For example, students need to be proficient in TEKS 1.5.E, "understand that the equal sign represents a relationship where expressions on each side of the equal sign represent the same value(s)," in order to be successful in learning grade 2, Unit 1, Lesson 9. The lesson procedures are structured the same throughout grade levels and lessons to create procedural connections throughout the materials.

In grade 2, Unit 3, Lesson 2, there is a routine called What Do You Know About ____? This routine is meant to engage students in the lesson and allow them to bring up their prior schema on a topic. This routine was introduced in the kindergarten materials, repeatedly used in the grade 1 materials, and continues with grade 2. The goal of these routines is to "increase student collaboration and leverage student ideas during lessons."

In grade 2, Unit 4, Lesson 6, 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 6, students use the How Many Do You See? routine to develop fluency by looking at and describing the different ways they see different arrangements of base-ten blocks. In Lesson 6, students use their fluency and flexibility in identifying given arrangements to use given representations of a number to fill in a missing representation of the same value. Students also identify and write numbers written in expanded form to represent the value of each digit.

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 2, a "Spiral Review" is included at the end of lessons in worksheet form, providing students with retrieval opportunities throughout units and lessons. For example, in Unit 4, "Numbers to 1,200," Lesson 4 reviews measurement in centimeters, while Lesson 15 reviews multiple concepts like number lines, standard form, measurement, and missing numbers.

The grade 2, Unit 3 materials are focused on "Measuring and Solving Problems Using Length." Unit 3, Lesson 2 has a "Spiral Review" section where students "find the value of the expression" for both an addition and subtraction equation. In grade 2, Unit 3, Lesson 9 focuses on students solving problems about "the lengths of animals," but also provides a "Spiral Review" of addition and subtraction with two-digit numbers.

In grade 2, Unit 4, Sub-Unit 1, students are provided opportunities to use previously learned skills and concepts from Units 1–3 in order to read, write, represent, compose, and decompose three and four digit numbers up to 1,200.

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

In grade 2, there are interleaved practice opportunities throughout the program, providing students a chance to practice previously learned skills and concepts. For example, in Unit 6, Lesson 2, there is 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 and a review of halves and fourths.

In the grade 2, Unit 2, Lesson 19, "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 solving story problems using addition and subtraction, equations, finding multiple equations involving the same total, and place value representations, creating interleaved practice across units and lessons.

Each grade 2 unit offers center ideas for students to practice skills and concepts learned in current lessons, or prior lessons, units, and grade levels. For example, Unit 2 center ideas include "Subtract Tens or Ones," which is introduced in grade 2 and practiced in Lessons 11–13 and Lessons 24–25. It also includes center ideas for "Get Your Numbers in Order—Two-digit Numbers," which is learned in grade 1 and practiced in Lessons 6–9.

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
—	**TOTAL**	5/5

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

In grade 2, Unit 6, Lesson 8, students "analyze the partial sums algorithm and the standard algorithm where a single digit is used to represent the place value sum." Activity 1 in the lesson is titled, "A New Algorithm." The objective is for students to "compare a partial sums algorithm and the standard algorithm for addition before using them to evaluate expressions, reinforcing the relationships between the algorithms." Students solve several problems using the different algorithms. The teacher asks, "What is similar and different about the two algorithms? Where do you see the 2, 80, and 400 from the partial sums algorithm in the standard algorithm? Why are there fewer steps when using the standard algorithm compared to the partial sums algorithm?" After completing this activity, students learn that the "standard algorithm uses numbers written in standard form for the addends and the sum. When you add, you record the value of each digit in standard form, so there are fewer steps."

In grade 2, Unit 2, Lesson 21, students begin their work with two-step story problems by interpreting math stories with three known values. Students will focus on "interpreting and reasoning about the information that is presented in math stories rather than answering the questions they pose. This helps students focus on the structure of story problems regardless of the number of unknowns." By the end of the lesson, when given a mathematical story, students will write questions based on their interpretation of the details and give it to another student to solve. Students should be asking, "How can I use the known amounts in the story to help me write my questions? Can this question be answered given the information in the story problem?"

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

The grade 2 materials include questions and tasks that require students to create models to represent mathematical situations. For example, Unit 1, Lesson 14, Activity 2 requires students to analyze and solve a variety of comparison problems. Students have the option to represent each problem by filling in the

provided strip diagrams on the "Comparison Strip Diagram" printable resource, but students can choose to create any representation and solve with any strategy.

In grade 2, Unit 7, Lesson 7, students learn about separating a quantity into equal amounts. In this lesson, students "use objects to model a story problem in which a total is separated into equal groups. Then, students will create, model, and describe their own separating story problems involving equal groups."

In grade 2, Unit 2, Lesson 3, students are studying the value of U.S. coins and using addition within 100 to solve story problems. In this lesson, students will "use their understanding of place value to find and build models of combinations of coins with a value of 100 cents and discover that a dollar has a value of 100 cents. Students then strategically create models of coins that have a given value."

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 2 lessons provide multiple opportunities for conceptual understanding through questioning and tasks. For example, in Unit 4, Lesson 5, "students use responsive feedback to build conceptual understanding of place value and make connections across representations of numbers" while using the student paired lesson screens. Within this lesson, teachers are instructed to provide access to the "Graphic Organizer" PDF, "Place Value Chart," the "Four-Digit Place Value Mat," and base-ten blocks for students who need those tools to strengthen their understanding.

In grade 2, Unit 3, Lesson 8, students measure the length of items using feet and inches. This lesson introduces the concept of "foot" as a standard unit of measurement. Students build their conceptual understanding of "foot" as a unit of measurement. The lesson has students apply their conceptual understanding of measurement to make estimates about length and then use measurement tools to find the actual length of the selected objects in feet and inches. Additionally, students will use their conceptual understanding of measurement tools to choose which measurement tool should be used for measuring a selected object.

In grade 2, Unit 6, Lesson 12, students decompose a 10 when subtracting within 1,000. Students will build their conceptual understanding of place value by deciding if they need to decompose a 10 when subtracting within 1,000. In doing so, students will apply their knowledge of place-value based strategies for decomposing a 10 when subtracting within 100 to now decomposing a 10 when subtracting within 1,000.

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 2 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 2 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 2 overview of Unit 5 includes "Fluency Practice," which is accessible via the online platform. The materials provide an activity titled, "Addition and Subtraction by Heart II," which is a flashcard activity focusing on addition and subtraction within 20. Representations used include ten-frames, number cards, number bars, and number lines. 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.

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. In grade 2, Unit 2, Lesson 2, students learn to compare and represent different types of story problems. In Unit 2, Lesson 3, students solve "Add To," "Take From," and "Result Unknown" story problems and represent the problems with equations that include an underline to show which number is the answer.

In grade 2, Unit 4, Lesson 2, students use skip counting by tens and hundreds in order to represent numbers in different ways. The lesson builds students' conceptual understanding that a hundred is made up of a certain number of tens. By applying this understanding, students build automaticity and "develop flexibility with the base-ten system and reflect on the efficiency of representing numbers using hundreds, instead of groups of ten." At the end of the lesson, students will have an opportunity to independently practice using skip counting most efficiently to determine the composition/decomposition of a number through the program's Show What You Know materials.

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 grade 2 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 5, Lesson 13, during the "Launch" part of the "Warm-Up," students are asked, "How could 30 + 25 help you solve 15 + 25 + 15?" During the "Connect" portion of the lesson, students work with Think-Pair-Share and are asked to respond to the following: "What do you notice about the number of equal parts in the circle and the number of parts you have to color to shade the whole circle?" In the Synthesis portion of the lesson, students are asked to evaluate with the question, "Is the same amount of each square shaded? How do you know?"

The grade 2 materials provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson. For example, in Unit 7, Lesson 4, Activity 2, during the "Monitor" portion of the lesson, students are asked, "How could you use what you know about equal groups to help you find if there is an even or odd amount of kids?" During the Synthesis portion of the lesson, students are asked, "Is 19 an even number or odd number? How do you know?" Such questions give students the opportunity to evaluate the problem they are to solve as well as the process and solution. Another example is during the Lesson 8 "Warm-Up," the teacher poses the question, "How might counting equal groups help you solve story problems?" In Activity 1, students are asked, "What information might be helpful to write a joining story problem involving equal groups?"

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

In grade 2, Unit 4, Lesson 15, teachers are provided guidance for increasingly efficient student performance. In the "Monitor" section, there are embedded questions, such as, "In your own words, what are you being asked to do?" and "How could you use the value of each digit to help you order the given numbers?"

The "Connect" section of grade 2, Unit 6, Lesson 7 gives teachers guidance to provide students with efficient approaches by explicitly teaching them partial sum and expanded form algorithms. Students are

asked to share strategies for how they solved the equation. The teacher then reviews their responses in the "Key Takeaway" portion of the lesson.

In grade 2, Unit 3, Lesson 10, students measure the length of objects without starting at zero. This particular lesson focuses on identifying and using patterns in the numerals to identify 10 more or 10 less without counting. The materials state, "students may count between endpoints or use what they know about addition and subtraction to find the length. When students measure objects starting at different points on a measurement tool, they notice the measurement of each object is the same, regardless of the starting point." Throughout the lesson, the materials include embedded support for teachers to guide students toward increasingly efficient approaches through questioning. As students work on completing the first task of Lesson 10, 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 embedded questions within the lesson structure for a teacher to ask. For example, "What do you notice about how the caterpillar is lined up on the measurement tool?" and "How could you use the structure of the measurement tool to measure the length of the caterpillar?"

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 grade 2 materials explicitly state how the conceptual emphasis of the TEKS is addressed. For example, Unit 4, Lesson 1 addresses the concept standard of 2.2.A, which states, "Use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and one." The "Key Concepts" section of the lesson overview states, "In this unit, students use place value understanding to represent and compare numbers up to 1,200 in multiple ways, creating the foundation for adding within 1,000 in Unit 6. This exploration provides an opportunity to observe students' skills and conceptual understanding of counting and place value."

In grade 2, lessons connect conceptual understanding to the support of procedural understanding. This can be found in Unit 3, Lessons 2–7. For example, the "Integrating Rigor in Student Thinking" section of Lesson 5 states that "Students build their conceptual understanding of the length of a meter. Students measure the lengths of objects in meters and centimeters with a ruler and a meterstick to practice procedural skills." This directly supports the TEKS 2.9.D.

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.

The grade 2 lessons feature tasks that integrate concrete, pictorial, and abstract forms to support student learning. For example, in Unit 6, Lesson 4, "students are directed to use base-ten blocks to solve the equation," then "write the answer in standard form." In the same lesson, students also "use pictorial form to explain their thinking." Similarly, in Unit 7, Lesson 8, Activity 1, students write a multiplication story problem using pictorial representations and then transition to abstract reasoning as they "write repeated addition sentences and solve."

In grade 2, Unit 7, Sub-Unit 3, Lessons 9–11, the materials move from concrete to abstract representations as students develop an understanding of the concept of area. In Lesson 9, students begin by using pattern blocks to compare the area of different shapes. "Students compare the areas of 3 shapes using pattern blocks to emphasize the need for a common unit to compare areas." Later in the lesson, students move to pictorial representations of the same shapes during "Independent Practice." In

Lesson 10, students use square tiles to cover rectilinear figures, still working concretely, before transitioning to pictorial representations. The materials state that, "Students sort gridded rectangles by area... transitioning from relying on physical tiles to counting." By Lesson 11, students use grid paper to create rectangles and estimate area using "square centimeters, square inches, square feet, and square meters," demonstrating abstract reasoning and appropriate unit selection.

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 2 materials include support for students in "connecting, creating, defining, and explaining concrete and representational models to abstract concepts." For example, in Unit 4, Lesson 7, Activity 2, students first work independently on a math task, then collaborate with a partner to explain and justify their thinking. The materials provide students with opportunities to create models, define their reasoning, and articulate how their representations connect to mathematical ideas. The *Teacher Edition* further supports this process with guiding questions and strategies to help students articulate and refine their abstract understanding based on their models.

Across multiple units, grade 2 materials offer opportunities for students to connect concrete and pictorial models to abstract concepts. In Unit 1, students use their understanding of place value and properties of operations to solve problems within 20 and 100, including interpreting bar graphs and pictographs. Unit 2 builds on this by introducing strategies like composing and decomposing tens to support addition and subtraction within 100. In Unit 5, students partition shapes and draw fractional parts, then explain their thinking using formal math language. For example, in Lesson 10, Activity 2, students describe how increasing the number of parts in a fraction results in smaller pieces, connecting visual models to the abstract concept of fractional value.

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
—	**TOTAL**	10/10

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

The grade 2 materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, or other language development strategies. For example, in Unit 2, Lesson 24, students construct a Frayer Model to explore the term *commutative property of addition*. This activity requires students to define the term, provide an example and non-example, and create a related drawing, supporting both conceptual understanding and vocabulary development.

In grade 2, Unit 1, Lesson 8, students are introduced to pictographs using the Notice and Wonder routine. This strategy encourages students to describe features of the graph using terms, such as title, labels, symbols, and orientation. The teacher builds on this language by defining pictograph as "a way to show how many in each group or category using symbols," supporting the development of precise mathematical language through structured discourse and explicit vocabulary instruction.

In grade 2, Unit 7, Lesson 3 integrates vocabulary instruction throughout the lesson. In Activity 1, students use two-color counters to explore even and odd numbers. As students work in pairs, the teacher introduces the terms *odd number* and *even number* in context. In Activity 2, students identify patterns using the Think-Pair-Share routine, and during the Synthesis portion, the vocabulary is reinforced through the Word Structure: Compound Words routine, supporting retention and accurate usage of key terms.

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

The grade 2 materials include embedded teacher guidance that supports the development and contextual use of academic mathematical vocabulary. For example, in Unit 4, Lesson 7, the teacher introduces the new term *word form* by explicitly stating, "When you represent the place value of a number using only words, you are writing the number in word form." Further support is provided in the Synthesis section, where the materials suggest using the Word Connections: Making Predictions routine to deepen understanding by comparing word form and expanded form.

In grade 2, Unit 6, Lesson 11, vocabulary development is integrated into instruction through both direct teaching and guided practice. Students apply place value understanding while solving subtraction problems involving numbers within 1,000. The teacher is prompted to use visuals and gestures to emphasize vocabulary, such as *difference*, *ones*, *tens*, and *hundreds*, and to underline digit changes to highlight number patterns. This scaffolded guidance ensures that students internalize and use mathematical language while engaging in problem-solving.

In grade 2, Unit 7, Lesson 3, the materials provide targeted support for students with diverse learning needs, including those with challenges in visual-spatial processing and memory. Teachers are given embedded scaffolds, such as prompts and guiding questions to help students access content and use academic vocabulary effectively.

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.

The grade 2 materials include embedded teacher guidance that supports the application of appropriate mathematical language through structured discourse, vocabulary use, and responsive instruction. For example, in Unit 4, Lesson 12, students engage in peer discussions using routines, such as True or False?, Sentence Frames, Make a Conjecture, and Think-Pair-Share. The *Teacher Edition* includes embedded guidance labeled "Differentiation/Teacher Moves," which outlines exemplar student responses, provides prompts to support student thinking, and identifies what to listen for in student dialogue to guide instructional decisions.

In grade 2, Unit 6, Lesson 11, materials continue to support mathematical discourse through multiple instructional routines, including Number Talk, Compare and Connect, and Think-Pair-Share. Throughout the lesson, teachers are prompted to review and reinforce mathematical vocabulary and guide students in using precise syntax in their verbal responses. Embedded guidance includes suggested prompts, exemplar responses, and strategies to support students in expressing their mathematical thinking clearly and accurately.

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
—	**TOTAL**	6/6

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

At the start of each grade 2 unit, the *Teacher Edition* clearly outlines the standards addressed, categorized into "Addressing Standards" and "Process Standards." Each unit also includes a "Spotlight on Connecting the Content and Process Standards" section, which highlights how process standards are integrated throughout instruction. In Unit 2, a subsection titled "Students engage in these Mathematical Process Standards as they . . ." provides specific examples. For example, 2.1E is addressed when students represent the addition of multiples of ten using towers of ten cubes, drawings, and equations in Lesson 5, Activity 1. The same activity also supports 2.1B through similar representations and mathematical reasoning.

The "Item Analysis, Forms A and B" for the grade 2, Unit 6 End-of-Unit Assessment identifies how the process standards are integrated into the materials. For example, 2.1.C is integrated into Problems 2, 3, and 6. 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 2 overview, the "Texas Essential Knowledge and Skills (TEKS) Grade 2" section lists each process standard along with the corresponding units and lessons where it is addressed. For example, process standard 2.1.D is integrated across multiple units and lessons, including Unit 1, Lessons 5–9, 11, 13, and 15; Unit 2, Lessons 2, 7, 8, 10, 13–15, 17, 18, 21, and 23–25; Unit 3, Lessons 1–4, 9, and 12; Unit 4, Lessons 1–8 and 12–14; Unit 5, Lessons 2, 5, 6, and 10–16; Unit 6, Lessons 2, 3–5, 7, 8, 13, 14, 16–19, and 21; and Unit 7, Lessons 2, 3, 6, 8, and 10.

The *Grade 2 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 1, Lesson 3, 2.1.F builds toward 2.4.A, while in Unit 4, Lesson 1, 2.1.A, 2.1.B, 2.1.D, and 2.1.F build toward 2.2.A.

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 2 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, process standard 2.1.E, which involves creating and using representations to organize, record, and communicate mathematical ideas, is addressed in Lessons 8, 9, and 11.

Each unit in the grade 2 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 22, Activity 2, the materials state that students will engage in the process standard 2.1.B by using "strip diagrams to solve one-step and two-step story problems with more than one unknown."

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

The grade 2 materials include an overview of the TEKS process standards incorporated into each lesson. For example, in Unit 3, Lesson 1, four process standards are addressed. There is an explanation for teachers in the "Key Concepts" section regarding how these standards are addressed in the lesson.

In the grade 2 resources, each lesson begins with an overview page that states the process standards covered within that lesson. For example, in Unit 3, Lesson 2, process standards 2.1.C and 2.1.D are included. In the "Connections and Coherence" section, the materials state "students are introduced to centimeters as a metric unit of measurement and measure object lengths using base-ten units and tens rods. They begin describing length in terms of centimeters rather than base-ten units, preparing for future lessons with longer measurement tools. After comparing their measuring experiences, they choose the appropriate tool and express the difference in length between two objects in centimeters."

The grade 2 online overview for each lesson lists the process standards practiced within it. For example, Unit 4, Lesson 11 includes 2.1.E and 2.1.F. The teacher can hover over each standard 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
—	**TOTAL**	12/12

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

The grade 2 materials offer numerous opportunities for students to think mathematically, persevere in problem-solving, and make sense of math concepts. For example, in Unit 5, Lesson 11, students partition circles into halves, fourths, and eighths, identifying non-examples to assess their understanding and needs. Lessons follow a unit narrative, beginning with a Warm-Up to engage thinking, followed by activities. The "Monitor" section guides teachers to ask questions that prompt student thinking, such as, "What is similar and different about the two circles?" instead of giving direct answers. The "Differentiation/Teacher Moves" section provides strategies to support, strengthen, or extend student understanding. Lessons end with a Synthesis activity, where teachers lead students in reviewing concepts, clarifying misunderstandings, and connecting learning to real-world problems and broader math ideas.

In Unit 5, Lesson 4 of the grade 2 materials, students discuss and respond to open-ended questions for Problems 2, 3, and 8. Students sort shapes into categories and explain their reasoning to a partner, as well as analyze why the artist in the story problem sorted the shapes as they did. 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 2 materials support students in understanding and explaining that problems can be represented and solved in multiple ways. In Unit 2, Lesson 1, the goal is to find combinations of numbers by adding within 100. Students design a token system for a future classroom event. The *Teacher Edition* highlights that this non-routine task encourages multiple strategies and solutions, engaging students in mathematical practices and helping them see themselves as mathematicians. During Activity 1, students work with a partner to assign point values to tokens and determine the fewest tokens needed to pay for

an activity. They then select a different activity and decide whether to adjust token values. At the end of the lesson, pairs of students share and explain their work with the whole class.

In the grade 2 center, the "Equation Challenge" activity has students work together to use digit cards to make each equation true. Given six equations with the same answer, students partner up to create six different true equations. Throughout the activity, students have opportunities to explain and justify their answers with their partner.

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 2 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 Unit 2, Lesson 7, students decompose the number 10 in various ways using objects and then illustrate their findings on posters. They work together to complete a chart of solutions and participate in a Gallery Walk, where pairs review and discuss the thinking and representations of each group. The lesson concludes with a Show What You Know activity where students write about their mathematical understanding.

In Unit 7 of the grade 2 materials, students have multiple opportunities to work and discuss math with partners. For example, in Lesson 5, students solve and write equations together and explain how they know whether a number is even or odd. In Lesson 10, partners determine the area using square tiles and explain their reasoning to each other.

Throughout grade 2, Unit 6, students and teachers engage in whole-group math activities that involve completing, writing, and discussing math concepts. For example, in Lessons 2 and 7, the Warm-Up prompts students to share their understanding while the teacher records their ideas. In Lesson 14, Activity 1, during the "Monitor" and "Connect" sections, teachers and students discuss new learning from problems one through six.

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 2 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 1, students participate in a Mix and Mingle routine, giving number names to partners and explaining their reasoning. They then apply their understanding of place value to read and write numbers in word form, justifying their answers to their partners. The materials also provide guidance for teachers on what to listen for in student responses and offer questions to further prompt student thinking, ensuring students have ample opportunities to explain and justify their problem-solving strategies.

In grade 2, the materials support student reasoning and reflection through structured Warm-Up activities and guided discussions. For example, in Unit 4, Lesson 10, teachers project a number line and ask students to estimate the position of a given number, prompting them to construct and revise arguments based on additional information, with questions like "How did you estimate where 20 is located?" and "How did the label for 100 help you revise your estimate?" Similarly, in Unit 2, Lesson 24, students explain their problem-solving approaches in whole-group discussions and partner reflections, guided by questions, such as "What information from the story problem helped you choose how to solve?" and "How did you decide what to do first and next?"

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

The grade 2 materials include prompts to support teachers in providing explanatory feedback based on student responses. In Unit 3, Lesson 4, students estimate and measure object lengths in centimeters. 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, after Activity 1, teachers are encouraged to look for students who "visualize 1 centimeter and repeat it mentally." To deepen understanding, teachers can ask, "How could you use what you know about the length of your ruler or a 10-centimeter rod to check if your estimate is reasonable?"

Each grade 2 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 in the "Differentiation/Teacher Moves" section. For example, in Unit 5, Lesson 16, Activity 1, teachers supporting students who struggle might ask, "What do you know about telling time?" and "How can you use your knowledge of skip counting by 5 to help tell time?" These questions help guide student thinking and build understanding.