

#### Amplify Education, Inc.

English Mathematics, 5 Amplify Desmos Math Texas G5 Student Blended Package

MATERIAL TYPE ISBN FORMAT ADAPTIVE/STATIC

Full-Subject, Tier-1 9798895806807 Both Print and Digital

#### **Rating Overview**

TEKS SCORE	ELPS SCORE	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	100%	0	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. <u>Supports for All Learners</u>	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. <u>Productive Struggle</u>	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	<u>19</u>
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.

The materials include a suggested pacing calendar within the scope and sequence of the "Teacher Edition Overview." Additionally, the scope and sequence outlines the concepts, knowledge, and skills of the course aligned to the Texas Essential Knowledge and Skills (TEKS) and the Texas English Language Proficiency Standards (ELPS) for grade 5.

The grade 5 *Teacher Edition* provides "Alternate Calendar Suggestions" for 165 and 210 instructional days in the scope and sequence.

The grade 5 *Teacher Edition,* Unit 1 provides suggested pacing with "short on time" considerations.

## 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).

The scope and sequence provides the suggested instructional days for each unit and the total days per grade level. It includes two alternate calendars for 165 days and 210 days. For instance, the alternate calendar options state, "Refer to the Pacing Considerations on the Unit Overview pages, where you can find unit-specific guidance to which lessons and activities can be skipped or combined."

Each "Teacher Edition Unit Overview" includes pacing considerations, such as combining lessons or giving an End-of-Unit Assessment and the Pre-Unit Check on the same day. For instance, the materials state, "This lesson can be omitted. It is an exploration that helps students engage in the unit, but is not essential for meeting required TEKS. If omitted, read and discuss the Unit Story prior to Lesson 2."

### 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 *Teacher Edition* includes a summary of the unit, explaining the content goals.

The materials include a "Connections and Coherence" document that explains how concepts connect throughout the unit and describes the prior and future learning.

Each unit within the materials includes an explanation of how it is focused on the TEKS. The materials provide explanations about the unit progression and conceptual connections across units. For example, the materials state, "Students apply their understanding of factors to describe and identify numbers as either prime or composite."

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

Every unit has a "Unit at a Glance" page, which shows teachers everything they need to know to get started planning their upcoming unit. These resources support teachers in their unit planning and in making choices in response to students' thinking, strengths, and needs that arise throughout the unit.

In the "Teacher Edition Unit Overview," the mathematical background section includes processes for teachers to understand and prepare to teach a unit thoroughly. This includes understanding the sequence of learning in the unit by identifying concepts and the learning progression.

The materials include processes for teachers to understand and prepare to teach lessons thoroughly. This includes preparing for instruction by understanding how all materials will be used during the lesson, which is found within the *Teacher Edition* in the "Materials and Prep" section.

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

Guidance is provided for instructional leaders to support teachers with implementing the materials as designed. For example, the "K–5 Look-For Guide" explains how it supports leaders "with planning, coaching, walkthroughs, and observations while implementing *Amplify Desmos Math Texas*." The guide provides an outline of what to look for with the classroom set up and materials, the structured approach to problem-based learning, and how student thinking is made evident.

In the Amplify Desmos Math Texas "PD Library," there is a section specifically for instructional leaders to use scripted talk cards with educators when having coaching conversations. For example, the scripted talk card three guides educators to reflect on differences among students' learning.

#### 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 materials provide the teacher with the mathematical foundations from previous learning that lead to effective instruction for learning concepts within the unit. The "Connections and Coherence" within the materials provides prior and future learning information.

The materials include a "Unit Overview" that provides teacher guidance to support concept development by outlining the background knowledge and vocabulary teachers need to teach each lesson effectively. For example, each unit includes a spotlight on vocabulary with provided strategies.

In grade 5, the materials provide the teacher with the mathematical foundations from previous learning that lead to effective instruction for learning concepts within the unit. For example, in the rationale of the unit order, each unit summary describes the unit objective and how it builds on prior learning from previous grade levels, as well as how the current learning will support future learning.

The materials provide an overview of previously taught academic vocabulary and new and contextual vocabulary, and state in which lesson the new vocabulary is introduced at the beginning of each unit in the "Teacher Edition Overview."

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

Materials include a "Unit Caregiver Support" resource in both Spanish and English to provide families with a resource to support students at home. For example, the "Mathematical Background" section provides the content students learn in the unit with examples to solve equations. The "Unit Investigation" section provides the skills they are working on, and "Caregiver Connection" provides an activity to play at home.

The materials inform families in Spanish and English about the objectives of the unit and provide suggestions on how they can support student progress, such as visual representations, academic vocabulary, activities that reinforce learning at home, questions to ask at home, and strategies to reinforce learning. For instance, the "Caregiver Connection" states, "Students may enjoy comparing the

capacities of different containers from home to further develop their spatial reasoning. Encourage them to identify those with a surprisingly large or small capacity."	

#### 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).

All lessons in the *Teacher Edition* are accompanied by comprehensive lesson plans, which include content and language objectives, questions, tasks, materials, and all guidance, routines, and instructional moves to attain those objectives.

The materials in grade 5 "Unit Teacher Overview" direct teachers to the top of the activity pages within each lesson to gather the necessary materials.

In the Show What You Know section of the lesson, teachers assign students an independent task to demonstrate their understanding of the given math concept.

Questions are provided to check for understanding, such as, "You found a collection of objects and organized the objects into equal groups. Where do you see objects that have already been organized into equal groups?" Sample Student Work is provided to assess mastery of the lesson.

The materials include tasks within the lesson activities. For example, "Connect" in Grade 5, "Unit 2, Lesson 2" suggests using the Think-Pair-Share routine to answer the question, "How does each of the models represent the amount of food each animal will receive?"

## 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.

The *Teacher Edition* includes "Materials and Prep" for each unit. It lists "materials and resources used in this unit and where to find them." It also includes the suggested timing with the "Unit at a Glance." Pacing options are provided with suggested minutes for the Pre-Unit Check, Sub-Unit Quizzes, 17 Lessons, and End-of-Unit Assessments.

Each unit includes center resources, which consist of needed materials for both students and teachers. For instance, grade 5 "Centers Resources" includes a document for center directions for student use, such as a recording sheet, shape cards, and straightedges.

The "Lesson at a Glance" notes the materials needed for both educators and students to effectively engage in the lesson. For example, "Unit 4, Lesson 1" includes an activity with a materials subsection required for each activity.

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

All materials include an "Intervention and Extension" resource for extended practice, such as homework, extension, and enrichment.

Each lesson includes lesson materials for extended support, strengthening, and stretching. The differentiation page is located in the "Teacher Edition Overview." For example, the educator asks the stretch question, "How could you write another expression to represent the volume of the rectangular prism?"

The materials guide teachers in understanding how lesson materials can also serve as extended practice. "Differentiation Beyond the Lesson" offers guidance with provided activities to support, strengthen, or stretch learning objectives. The materials state, "If students fluently evaluate using their place value understanding to regroup, extend learning with these extension resources."

#### 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.

Amplify Desmos Math Texas grade 5 includes a variety of assessments and question types at the unit and lesson level. For example, grade 5, Unit 1, includes a Pre-Unit Check to learn about students' understanding of foundational skills and concepts at the unit level.

The materials include a variety of tasks within diagnostic assessments at the lesson level. The Show What You Know formative assessments focus on assessing key concepts from the lesson. For example, grade 5, Unit 1, "Volume, Factors, and Expressions" prompts students to a variety of question types such as equation editor, multiple choice, and text entry.

The materials include summative unit assessments measuring mastery of all skills taught within the unit. For example, the End-of-Unit Assessment in grade 5, Unit 2, "Multiplying and Dividing Fractions" provides eight questions varied in depth of knowledge levels, question types, and task types.

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

The materials include a grade 5 "mCLASS Beginning-of-Year Screener," which provides an opportunity for students to show what they know before they begin this year. The teacher will learn about students' foundational concepts and skills to help support, strengthen, and stretch understanding throughout the year.

In grade 5, Unit 1, "Volume, Factors and Expressions," the materials include examples of how to utilize different formative assessments, such as Pre-Unit Checks and Sub-Unit Quizzes.

The materials include the intended purpose for each type of instructional assessment. For instance, the goal of the grade 5, Unit 1, End-of-Unit Assessment is to check for understanding of the concepts and skills students have learned from the unit.

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

The materials provide the teacher with suggestions and a script for teachers to follow to ensure a consistent administration of the various types of assessments in *Amplify Desmos Math Texas*.

The materials include accurate administration of instructional assessments by providing clear information about the time for assessments. For instance, the grade 5, Pre-Unit Check, includes an "Assess and Respond" section, which contains the icon of a clock showing the allotted time of 20 minutes.

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

Amplify Desmos Math Texas grade 5 includes diagnostic assessments at the beginning of each unit through the Pre-Unit Check to determine students' proficiency with prerequisite skills in the upcoming unit. These assessments are aligned with the unit's objectives and the course.

The materials include formative assessment items aligned with the TEKS. For example, objectives are listed for each Show What You Know assessment, aligned to the TEKS and lesson objectives.

The materials include a summative assessment in the form of the End-of-Unit Assessment aligned to the TEKS and objectives of the unit.

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

The materials include formative assessments with multiple-choice, open-response, and multi-select items aligned to the TEKS. For instance, the 5.3 Sub-Unit 1 Quiz includes digital and paper versions, which prompt students to show their thinking and practice multiple-choice and open-response problem-type questions.

The materials include instructional assessments with TEKS-aligned items of different complexity levels.

The "Assess and Respond Item Analysis" lists depth of knowledge question levels. For example, in the 5.3 End-of-Unit Assessment, problems 4 and 5 are listed as depth of knowledge questions at level 2.

#### 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 materials provide scoring rubrics and guidance for teachers to interpret student performance. For example, the 5.1 End-of-Unit Assessment, Form A rubric suggests teachers categorize students into four different categories based on their responses: meeting, approaching, developing, or beginning.

The grade 5, Unit 1, "End-of-Unit Assessment" provides scoring rubrics with clear guidelines for interpreting student performance and responses. For example, the rubric suggests students who answered incorrectly on problem 3, but whose work includes evidence of understanding, may have made a calculation error.

The "Assess and Respond" document guides the educator in responding to students' performance to inform remediation and enrichment based on student performance.

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

In grade 5, the materials include guidance to support the teacher in utilizing assessment results for purposeful planning of tasks and activities. For example, each End-of-Unit Assessment offers resources like mini-lessons and center activities for additional support to enhance differentiation beyond the lesson.

The materials include instructional guidance for tasks and activities that target various skills, as determined by assessment data. For example, the grade 5 "Intervention and Extension Resources Overview" explains how to identify students who need support, strengthening, or challenges based on their responses.

### 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 grade 5, the "Assessments Resource Overview" provides two types of reporting for teacher use to monitor student progress and growth. For example, performance and standards reports are available for teachers to view and track student and standards data.

Using the "Assessment Resources Standards Report," teachers can view and track students' performance and progress on a single standard across time on Sub-Unit Quizzes and End-of-Unit Assessments.

Students can track their progress and growth through the "Watch Your Knowledge Grow" page by assessing their understanding before beginning and after each unit.

#### 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.

In grade 5, Unit 1, Lesson 2, the materials include a section for differentiation beyond the lesson. It provides instructions for identifying and supporting students who have not reached proficiency on grade-level content and skills.

Materials in grade 5, Unit 3 include teacher guidance for each lesson focusing on differentiation during lessons using the in-lesson teacher moves to provide additional instruction for students who have not yet reached proficiency on grade-level content and skills.

In grade 5, the materials provide teacher guidance for students who need support to understand the learning goals. For example, in Unit 1, Lesson 10, "Differentiation Beyond the Lesson" provides a scaffolded 15-minute lesson in the "Differentiation Table" at the end of the lesson.

### 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 materials include embedded supports for unfamiliar vocabulary and references in text. For example, the "Vocabulary of the Unit" page for grade 5, Unit 2, shows the new, reviewed, and contextual vocabulary that students will learn in the unit, along with vocabulary strategies to support students' vocabulary development.

Grade 5 resources include "Math Language Development Resources," which provide lesson-level, unit-level, and course-level support that benefits all students.

In *Amplify Desmos Math Texas*, the "Total Physical Response" routine is used to support students' language acquisition of new vocabulary words and phrases by connecting listening with physical movement. In this routine, students respond to oral instructions or requests that include the new vocabulary by using gestures or other physical actions. For example, in grade 5, Unit 2, Lesson 2, the materials instruct the teacher to teach students the term "unit fraction" by using fingers.

## 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 5 materials provide differentiated instruction, enrichment, and extension activities for teachers to guide students who have demonstrated proficiency in grade-level content. For example, Unit 2, Lesson 9 includes "Differentiation Beyond the Lesson," providing teachers with "Support, Strengthen, and Stretch" mini-lessons, centers, and extension activities.

The materials include enrichment activities. Additional activities within each lesson include center, lesson practice, fluency, and math adventures. For example, in grade 5, Unit 2, Lesson 9, the math adventures include Formula Won, a racing game in which players compete against Al using integers, mixed numbers, and decimals.

In grade 5, Unit 4, Lesson 7, the differentiation teacher moves within each activity of the lesson, providing three different levels of support with examples of what to look for and how to follow up with specific questions.

#### 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 materials include guidance to support the teacher in modeling and explaining. For instance, in grade 5, Unit 4, Lesson 5, Activity 1, "Launch," students are asked to share their strategies. Direct quotes are provided to ask students questions, such as, "How did you use this number line to precisely locate 0.003?" The teacher is then directed to mirror the challenges on screen seven.

The materials include questioning strategies and discussion prompts, which guide teachers in clearly explaining concepts and engaging students in deeper understandings. For example, the grade 5, Unit 4, Lesson 5, Activity 1, "Connect Key Takeaway" instructs teachers to say, "Depending on the scale of the number line, a decimal's location can be on a tick mark or estimated between tick marks."

When working through problem-solving situations, the materials include a series of think-aloud questions to model understanding and the process of building rectangular prisms, describing their structures, and exploring general strategies for determining their volumes.

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

The grade 5 *Teacher Edition* provides directions for effective lesson delivery by including detailed lesson plans with step-by-step directions, suggested pacing, and differentiation strategies for each lesson. For instance, the "Lesson at a Glance" provides suggested pacing for each part of the lesson. The whole group Warm-Up has a suggested pacing of ten minutes, Activity 1 has a suggested pacing of 15 minutes, Activity 2 has a suggested pacing of 20 minutes, Synthesis has a suggested pacing of ten minutes, and Show What You Know has a suggested pacing of five minutes.

The materials in grade 5, Unit 1, Lesson 12, Activity 1 include teacher guidance and recommendations for effective lesson delivery using a variety of instructional approaches, such as collaboration, Differentiation, Teacher Moves, student discussion, and access to one-inch tiles to represent solutions.

## 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 *Amplify Desmos Math Texa*s grade 5 "Navigating This Program" section includes instructional routines with clear headings and descriptions at the top of each portion of the lesson to help the teacher effectively implement recommended structures (e.g., whole group, small group, individual).

The materials support multiple types of practice opportunities as students apply concepts they are learning, including individual, partnered, center, whole-group, and small-group opportunities. For example, in grade 5, Unit 4, Lesson 5 Activity 1, students use Think-Pair-Share as they discuss what they notice about the estimates for the location of 0.001.

The materials include instructional routines with clear headings and descriptions to help the teacher effectively implement recommended structures (e.g., whole group, small group, individual) throughout a lesson. For example, the lesson at a glance shows all aspects of the lesson and includes pairs, whole class, and independent practice.

In grade 5, Unit 3, Lesson 3, the lesson at a glance includes instructional routines with clear headings and descriptions to help the teacher effectively implement recommended structures (e.g., whole group, small group, individual) throughout the lesson.

#### 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.

In grade 5, materials provide teacher guidance on linguistic accommodations aligned with the ELPS to help students develop and use increasingly complex academic language. For example, the "Pronunciation Guide" provides teacher facilitation to introduce new vocabulary and invite students to practice orally repeating the new words.

The materials include dedicated sections in the lesson plans for emergent bilingual students, including details about accommodations for levels of language proficiency (e.g., beginning, intermediate, advanced, or advanced-high). For example, in the "Math Language Development Resources," there is a section called "Letters and Sounds," which provides different questions to ask emergent bilinguals based on their level of proficiency.

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

The materials include information related to the state-approved ESL and bilingual programs and provide guidance on how the programs can be used within different instructional models. For example, the course level supports explaining how *Amplify Desmos Math Texas* meets the ELPS at point-of-use moments within each lesson and in the "Math Language Development Resources."

The materials provide embedded guidance for effective implementation in state-approved bilingual/ESL programs through lessons with specific language objectives, teacher guides, and tips for scaffolding content and language development. The "Math Language Development Resources" include an

"integrated system of lesson-level language supports, unit-level language supports, and course-level language supports."

The materials feature an online Professional Learning Library that integrates clear guidance on language acquisition techniques, such as sentence frames, graphic organizers, and sheltered instruction methods.

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.

In grade 5, the student's "English/Spanish Glossary" provides support for Emergent Bilingual (EB) students to develop academic vocabulary. For example, the vocabulary resource contains words side by side in English and Spanish with concise definitions and detailed visuals to support EB students in academic vocabulary acquisition.

The grade 5 materials provide guided opportunities for collaboration, where students are encouraged to use precise mathematical language when explaining their solution strategies to each other. Students use routine structures, such as Think-Pair-Share, as they engage in oral and written discourse activities. For instance, in Unit 4, Lesson 9, Activity 2, students use the Think-Pair-Share routine structure as they explain why each strategy resulted in the same answer.

The materials guide teachers in using written and oral discourse during the lesson to develop vocabulary. For example, in "Lesson 3," students create a Frayer Model graphic organizer that shows the definition, examples, and non-examples of the term unit fraction.

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 materials provide practice opportunities throughout the lessons and units, which require students to demonstrate a depth of understanding aligned to the TEKS. Each lesson contains practice items where students can demonstrate their knowledge. Each lesson provides the "Practice Problem Analysis Table," which lists the varying Depth of Knowledge (DOK), TEKS alignment, on-lesson items, spiral review, and fluency information for each item.

The materials provide practice opportunities over the course of a lesson, which require students to demonstrate a depth of understanding aligned to the TEKS. For instance, in grade 5, Unit 2, Lesson 3, Activity 1, students may determine that the product is greater than one or determine that the product is one. To stretch students' thinking, the teacher is directed to ask if the product will always be one when the denominator of the unit fraction and the whole number factor are the same: "What would happen if the whole number factor were four?"

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

Questions and tasks increase in rigor and complexity. In grade 5, "Unit 4, Lesson 1," students engage in a non-routine task with multiple answers and solution paths to build interest. Students then explore the density of numbers as they identify numbers between two whole numbers. Students then use their understanding of place value and fractions to identify and name decimals. In Unit 4, Lesson 2, students build on their conceptual understanding of representing numbers to thousandths with fractions and decimals.

DOK levels are included with End-of-Unit Assessments, which provide a variety of question types, such as open-ended questions and multi-select.

#### 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 5 "Designed Around the TEKS" section explains the connections between the patterns of different units of instruction and how they scaffold and support future learning.

The "K–5 Scope of Sequence" provides units that flow logically from one concept to another, making it easier to reinforce prior learning and introduce new topics with meaningful connections. For example, the focus of multi-digit multiplication and division in grade 5, Unit 3 is reinforced in Unit 4's decimal operations.

The grade 5 Unit 1, Lesson 2 materials include a section explaining the connections and coherence of the standards addressed and their connection to other mathematical concepts within the same unit. It includes explicit connections to their prior learning and future learning within that unit. It also includes a prompt for teachers to have students make connections with the prior school year's big ideas and concepts.

## 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 *Teacher Edition* contains a "Connections and Coherence" section at the beginning of each unit that connects prior grade-level content and future-level content to the current grade level.

The materials include a "Vocabulary of the Unit," highlighting the academic vocabulary new to the grade level and those introduced in previous grade levels. The "Spotlight on Vocabulary" includes strategies for teachers to allow students to make connections.

The *Teacher Edition* includes a section called "Connections to Future Learning" that explains the content learned in the unit and how it will impact future learning.

## 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 grade 5 "Connections and Coherence" materials include a coherence section that connects procedures from prior learning. For example, in Unit 1, the materials demonstrate that students classified and sorted rectangular prisms by their attributes in grade 2 and grade 3, a concept they will need to build upon in the current unit.

Each Sub-Unit within the materials includes "Math That Matters Most," which includes the progression of strategies, skills, or language. For example, in grade 5, Sub-Unit 1, students begin by representing decimals in different ways, including expanded form and expanded notation, to comparing decimals using place value understanding. Students progress to rounding multi-digit decimals to the thousandths and are able to then add and subtract decimals using place value strategies and the standard algorithm.

The materials include a "TEKS—Building On" section in the unit overview that lists the TEKS students have learned prior to the lesson or grade level taught.

#### 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.

The materials provide spaced retrieval opportunities with previously learned skills across lessons and units in spiraled review. The grade 5, Unit 2, Lesson 5, "Practice Problem Item Analysis" table lists items that are part of the students' spiral review and items that build fluency to support student learning in Unit 2, Lesson 6.

In grade 5, Unit 3, Lesson 10, "Independence Practice," the "Practice Problem Item Analysis" table problems show the items that provided spaced retrieval opportunities for students to apply knowledge of previously learned concepts, like the TEKS in geometry and measurement, and algebraic reasoning.

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

The materials provide interleaved practice opportunities across lessons and units. Practice reinforces conceptual understanding, fluency, and ongoing spiral review. Grade 5, Unit 2, Lesson 2 practice provides problems that reinforce the concepts taught within the lesson and spiral concepts of two-by-two-digit multiplication and prime and composite number identification.

Unit 1, Lesson 17in the grade 5 *Student Edition* includes problems that provide interleaved practice opportunities to solve multistep story problems involving whole numbers using multiple operations.

#### 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 5, questions and tasks require students to interpret, analyze, and evaluate models and representations. For example, the Unit 1, Lesson 4 Warm-Up prompts students to "estimate the number of unit cubes used to build a partially shown rectangular prism, preparing them to use the layered structure when determining the volumes of rectangular prisms."

In Unit 4, Lesson 2, "Connect," students share their representations of fractions to analyze how fractions, decimals, and numbers are related.

The problems in grade 5, Unit 1, End-of-Unit Assessment, Form A require students to interpret and analyze given information, develop a plan, determine the solution, justify the solution, and check for reasonableness.

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

Amplify Desmos Math Texas, grade 5 allows opportunities to create models. For example, in Unit 1, Lesson 3, students are required to build rectangular prisms of a given volume.

In Unit 5, Lesson 9, students create a variety of models, such as fraction strips and number lines, to represent adding and subtracting decimals.

Teachers can incorporate hands-on activities to help students construct their own understanding. For example, in grade 5, Unit 1, Lesson 6, the materials prompt students to model a rectangular prism with centimeter cubes using given dimensions for length, width, and height.

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

Questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts. In grade 5, Unit 5, Lesson 8, "Three Reads," students are prompted to represent and solve addition and subtraction fractional problems using fraction strips to show their thinking.

In Unit 3, Lesson 14, students apply conceptual understanding of types of taxes, gross income, and net income to new situations and problems.

All units include Sub-Unit Quizzes to assess students on a subset of mathematical skills, conceptual understandings, and procedural fluencies from the unit.

#### 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 materials provide tasks designed to build students' automaticity and fluency. For example, the grade 5 "Centers" resource provides an activity called Cover Up, in which students practice multiplying using factors of 1–9 to build their automaticity.

In grade 5, instructional routines such as Warm-Ups are embedded into the lessons to help students develop fluency skills. For example, in Unit 5, Lesson 14, students analyze comparison statements involving sums and differences of fractions and mixed numbers with unequal denominators without evaluating all expressions to develop fluency with estimating mentally. This builds students' fluency and automaticity for adding and subtracting positive rational numbers.

Additionally, the digital "Fluency Practice for All" provides digital flashcard sets and activities to build vital math skills and enhance students' automaticity and fluency in completing grade-level tasks.

## 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. For example, grade 5 lessons prompt students to show their thinking and use a variety of strategies to solve problems and build accuracy in understanding their thinking and procedure in partner discussions.

In Unit 2, Lesson 5, students compare and contrast two expressions and then share their thinking and pictorial models to improve efficiency in future lessons.

Unit 4, Lesson 16 provides students with opportunities to choose a strategy to solve division problems, providing flexible mathematical procedures.

### 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.

Materials provide opportunities for students to evaluate procedures and processes.

In Unit 3, Lesson 5, "Connect," the materials prompt the teacher to have students use the Think-Pair-Share routine and ask, "How did the standard algorithm help you keep track of your work?" "How did you organize the regrouped values? Why does that make sense?" "How might you organize your work if you had to regroup every time?"

In grade 5, the materials provide the teacher with questions to guide students in evaluating solutions. For example, in Unit 4, Lesson 12, students are asked, "What might this person be trying to show on the hundredths model? How do you know?"

Additionally, in the materials in grade 5, Unit 3, Lesson 2, students evaluate their estimates for reasonableness and discuss how the process of estimating before solving can ensure solutions are accurate.

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

Teacher guidance, such as prompts to guide students' thinking for more efficient problem solving, is included. For example, in Unit 3, Lesson 6, the materials include a script for teachers to remind students that, within this Sub-Unit, they built on familiar strategies and representations of multiplication to multiply greater multi-digit numbers, and then expanded their representations to include the standard algorithm. The teacher is then directed to remind students that in future lessons, they can choose a strategy based on what is most efficient for them.

Materials contain embedded supports for teachers to guide students toward increasingly efficient approaches. For example, in Unit 4, Lesson 15, students are guided toward thinking more critically about how to decompose numbers when using an area model to understand using decomposition as an efficient strategy for dividing decimals.

Additionally, in grade 5, embedded supports, such as guiding questions to prompt students toward efficient approaches, include questions such as "How might this thinking be helpful as you multiply with decimals?"

#### 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 lesson overview connects conceptual understanding to the procedural emphasis of the TEKS. For instance, Unit 4, Lesson 7, "Which Way Down the Mountain?" explains how students build their conceptual understanding of rounding using their knowledge of place value. Students then develop procedural skills for rounding decimals.

In grade 5, Unit 4, Lesson 7, the materials support teachers in planning lessons by balancing conceptual understanding and procedural fluency in alignment with the TEKS. For example, the lesson overview states, "students continue to build their conceptual understanding of rounding, using their understanding of place value and relative distance to round," while practicing procedural skills to round decimals.

## 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.

Questions and tasks provided in grade 5, Unit 1, lessons include the use of concrete models, pictorial representations, and abstract representations, as required by the TEKS. For example, in Unit 1, the materials task students to use unit cubes and pictorial representations to find the volume of three-dimensional rectangles and cubes while developing formulas to figure out the total volume of rectangular prisms.

Questions and tasks provided in grade 5, Unit 3, Lesson 3, include the use of pictorial and abstract representations, as required by the TEKS. For example, the *Student Edition* materials provide opportunities for students to use area models and the partial product algorithm strategy to solve real-world problems.

## 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 5 materials include supports for students in connecting, creating, and explaining concrete models to abstract concepts, as required by the TEKS. For example, in Unit 4, Lesson 14, "Breaking It Down!" students further their conceptual understanding of representing decimals with equivalent values. Students then build their procedural skills for dividing a decimal by a whole number using objects.

In grade 5, Unit 4, Lesson 10, the tasks allow students to connect, create, and explain when multiplying whole numbers and decimals. For example, students represent each multiplication expression with baseten blocks and determine the product while explaining how the strategies used in Problems 1–5 are similar and different.

In grade 5, Unit 2, Lesson 2, students use double-sided counters to represent and solve story problems involving multiplication of whole numbers and fractions with area models. They then discuss how the models represent what is happening in the problem.

#### 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.

Materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, or other language development strategies. For example, each unit contains a "Vocabulary of the Unit" overview page listing the new vocabulary, review vocabulary, and contextual vocabulary of the unit. The spotlight on vocabulary section highlights strategies for students to develop academic mathematical language.

Materials offer students opportunities to build their academic mathematical language through visual supports, hands-on manipulatives, and additional language development strategies. For example, in Unit 3, Lesson 6, Activity 1, the teacher prompts students to use base-ten blocks, visual vocabulary cards, and gestures to divide multi-digit dividends by one-digit divisors.

The "Math Language Development Resources" include vocabulary routines to develop mathematical language. For example, the Frayer Model routine prompts students to complete a four-part graphic organizer that centers around a vocabulary word or phrase. The four parts of the graphic organizer include a definition of the vocabulary term, characteristics of the vocabulary term, examples of the vocabulary term, and non-examples of the vocabulary term.

Other language development strategies include the Total Physical Response routine, which supports students' language acquisition of new vocabulary words and phrases by connecting listening with physical movement. In this routine, students respond to oral instructions or requests that include the new vocabulary by using gestures or other physical actions.

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

Materials include embedded educator guidance to scaffold and support students' development and use of academic mathematical vocabulary in context. The "Word Structure: Compound Words" vocabulary routine uses the terms gross income, income tax, net income, payroll tax, property tax, and sales tax to support students' understanding of vocabulary.

The "Math Language Development Resources" are supplemental resources that support and extend students' use of academic mathematical vocabulary. They provide different vocabulary routines that can be used throughout the curriculum to support students' understanding of vocabulary.

The "Glossary," which can be found on the digital "Course Overview" page and in the *Teacher Edition*, provides clear definitions of mathematical vocabulary, sometimes incorporating visuals to ensure support and cohesiveness of the vocabulary. Translations in Spanish are also provided.

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 materials include embedded teacher guidance to support the application of mathematical language, including vocabulary, syntax, and discourse. For example, in grade 5, Unit 5, Lesson 3, students use the Discussion Supports—Pressing for Details routine to share their responses to screen four. The teacher is directed to press for details as students compare converting from milligrams to grams and from grams to kilograms by asking, "What units would you divide? How would you know to divide them? How much would you divide by?" Students then use the Think-Pair-Share routine as they consider why the same process can be applied to convert milligrams to grams and grams to kilograms.

Materials include embedded teacher guidance to support the application of appropriate mathematical language to support mathematical conversations, which provide opportunities for students to hear, refine, and use math language with peers and develop their math language toolkit over time. For example, in grade 5, Unit 3, Lesson 6, Activity 1, students listen and explain the parts of a division problem using cognates, sentence frames, and peer discussion.

Materials include embedded teacher guidance to support student responses by providing exemplar responses to questions and tasks in the *Teacher Edition*.

#### 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.

The grade 5 materials integrate the TEKS process standards appropriately by including a "Connections and Coherence" page in each unit, which spotlights the integration of the TEKS process standards throughout the lessons in the existing unit.

The grade 5 materials include an explanation of the TEKS and how the process standards are appropriately integrated into the materials in the content standards. For example, for the "Geometry and Measurement Unit," the student applies mathematical process standards to identify locations on a coordinate plane.

Additionally, "End-of-Unit Assessments" integrate the TEKS process standards in assessment questions and include a table that lists the relevant TEKS process standard assessed.

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

The "Teacher Edition Overview" includes a description of how the TEKS process standards are incorporated throughout the course. For example, a table lists the TEKS process standards to show how they are incorporated throughout all the lessons of the curriculum.

The "Connections and Coherence" section in each lesson specifies how the TEKS process standards are connected and how they build over time. For example, in grade 5, "Designed Around the TEKS," the "Table of Contents" lists each lesson and the TEKS content and process standards alignment throughout the course.

Amplify Desmos Math Texas describes how TEKS process standards are incorporated and connected throughout each course. The "Table of Contents" includes the units, broken up into Sub-Units and lessons within each Sub-Unit. To the side of the lessons are the math process standards that are targeted in that specific lesson. For example, Lesson 3 targets 5.1E, 5.1G, and 5.6A process standards.

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

Amplify Desmos Math Texas grade 5 materials include a description for each unit of how TEKS process standards are incorporated throughout the unit. The "Unit at a Glance" lists the math process standards covered in each lesson of the unit. For example, the TEKS process standards for Unit 2 are printed in gray at the bottom of the box for each lesson.

Amplify Desmos Math Texas grade 5 materials include a description for each unit of how the TEKS process standards are incorporated and connected throughout the unit. For example, each unit in the Teacher Edition includes "Connections and Coherence," which explains how students engage with process standards in the following lessons.

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

Amplify Desmos Math Texas, grade 5 materials include an overview of the TEKS process standards incorporated into each lesson. The *Teacher Edition* includes the TEKS process standards listed. For example, in Unit 6, Lesson 12, the following math process standards are listed: 5.1.A, 5.1.D, 5.1.E, and 5.1.F.

The TEKS process standards are incorporated into each lesson in the Student Edition. Each lesson includes "Connections and Coherence" and "Prior/Future Learning" sections, which explain how the focal TEKS content and process standards relate to past and future student learning.

#### 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 5 materials provide opportunities for students to think mathematically, persevere through problem-solving, and make sense of mathematics. For example, each lesson begins with a Warm-Up to engage students in tasks that elicit multiple strategies and solutions.

Many of the problems throughout the units have multiple answers and solutions, thus "inviting all students to see themselves as mathematicians."

In grade 5, Unit 1, Lesson 7, the materials provide guiding questions when students encounter difficulties, including, "How could you decompose factors in expressions C and D differently to make mental math more straightforward?"

In grade 5, the materials include multistep tasks for students to practice applying problem-solving strategies. For example, in grade 5, Unit 4, Lesson 9, Problem 3, students are asked to solve a multistep decimal subtraction real-world problem.

### 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 5 materials support students in understanding, explaining, and justifying that there can be multiple ways to represent and solve problems and complete tasks. For instance, in Unit 4, Lessons 14–15, students represent decimal division with hundredths models and area models. In Lessons 16–17, students use estimation to reason about the size of quotients and extend their understanding of dividing using the standard algorithm.

In grade 5, Unit 3, Lesson 12, Activity 1, students use the Mix-and-Mingle routine to represent and solve multistep story problems and determine that multiple equations can represent the same story problem. Students also use sentence frames to discuss and justify their findings.

The materials incorporate think-pair-share activities that enable students to explain their reasoning for choosing a particular strategy. For instance, when learning about volume, students use the Think-Pair-Share routine to discuss the question, "Did you use the same strategy to determine the volume of each box? Why or why not?"

## 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.

In grade 5, materials are designed to require students to make sense of mathematics through multiple opportunities for students to do math, write about math, and discuss math with peers and teachers. For example, in Unit 5, Lesson 8, students use fraction strips to determine each sum as students solve and explain their thinking when solving problems. The Think-Pair-Share routine is used to answer the question, "How could you use fraction strips to add fractions with unequal denominators?"

The materials provide structured opportunities for students to articulate their mathematical thinking through written explanations. For example, in Unit 1, Lesson 1, the "Explore Organizer" document is available for those students who wish to write or draw their reflections.

Amplify Desmos Math Texas uses materials to engage students in making sense of mathematics by providing multiple opportunities to actively work on problems, write about their thinking, and engage in discussions with the class. For example, in grade 5, Unit 6, Lesson 2, Activity 1, students analyze and sort triangles based on their sides and angles, discuss with a partner how to classify triangles, and write what they notice and wonder.

#### 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.

In grade 5, Unit 1 provides strategies for teachers to guide students in reflecting on their problem-solving processes by considering alternative methods. For example, the Teacher Move directs teachers to invite students to review the problem and then provide additional opportunities for students to identify prime and composite numbers and ask them to justify their responses.

In grade 5, materials support teachers in guiding students to share and reflect on their problem-solving approaches. For example, in Unit 5, Lesson 3, Activity 1, differentiation provides questions to further guide students in their thinking, such as, "How could you convert from milligrams to kilograms?"

The materials support teachers in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications. In Unit 1, Lesson 3, students work in pairs to construct a rectangular prism. They take turns describing how they built their prism, then swap their creations to compare and solve for the volume of the other group's prism.

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

The grade 5 materials offer prompts and guidance to support teachers in providing feedback based on student responses and anticipated misconceptions. Each activity includes differentiation with examples of what to look for when participating in the activity. For example, in Unit 4, Lesson 5, if students estimate the location of 0.001 as about halfway between zero and the first tick mark, support may be provided by asking the student, "What is the value of the tick mark? Is 0.001 more or less than halfway between zero and 0.1?"

The materials provide teacher prompts and guidance to deliver explanatory feedback customized to student responses and expected misconceptions. For example, in grade 5, "Teacher Edition Overview," "Assess and Respond," teachers have guidance and prompts after each type of unit check or assessment to support students' learning and misconceptions.

The "Differentiation Teacher Moves" section provides a table with examples of what the teacher should look for, an example, and how to support or strengthen the learner with guiding questions. For example,

n Unit 1, Lesson 1, students who measure the heights of the containers can be asked, "What other tools could you use to verify which container is the largest?"					