McGraw Hill LLC

English Mathematics, Geometry

Texas Geometry

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Full-Subject, Tier-1	**9781264637324**	**Both Print and Digital**	**Static**

Rating Overview

TEKS SCORE	ELPS SCORE	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	100%	2	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	40 out of 41	98%
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	8
Category 6: Promoting Sexual Risk Avoidance	0

IMRA Quality Report

1. Intentional Instructional Design

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

1.1 Course-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.1a	All criteria for guidance met.	4/4
1.1b	All criteria for guidance met.	2/2
1.1c	All criteria for guidance met.	2/2
1.1d	All criteria for guidance met.	2/2
1.1e	All criteria for guidance met.	2/2
—	**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 scope and sequence that outlines the TEKS (Texas Essential Knowledge and Skills), ELPS (English Language Proficiency Standards), and concepts covered in the course. For example, in Chapter 4, which focuses on congruent triangles, the mathematical process standards TEKS 1A-1F are listed at the top of the document, indicating that these standards are incorporated across all eight lessons in the chapter. ELPS standards such as d.1.B, d.1.C, d.1.D, d.1.E, d.2.B-d.2.F, d.3.B-d.3.G, and d.4.A and d.4.C, are also included, demonstrating alignment throughout the chapter.

Each lesson also highlights specific content-related TEKS. For instance, Lesson 4-1, which focuses on classifying triangles, aligns with TEKS G.5(A), while Lesson 4-4, on proving triangles congruent using SSS and SAS, addresses TEKS G.5(B), G.6(B), and G.6(D).

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 materials include a "Scope and Sequence" that provides a Pacing Guide for 45-minute class periods and outlines the required instructional days. Lessons marked with an asterisk offer guidance on extensions or optional topics. The total flexible instructional range is between 167 and 180 days. For instance, the recommended pacing in Chapter 4: "Congruent Triangles" is 15-16 days, based on 45-minute lessons. Lesson 4-1: "Classifying Triangles," is suggested for one day. The Lesson 4 "Geometry Lab" covering angles of triangles is recommended for 0.5 days, while Lesson 4-2: "Angles of Triangles" is

advised for 1.5 days, indicating a variation in recommended instructional days. The "Mid-Chapter Quiz" is also marked with an asterisk, indicating that it is optional and may be omitted.

The "Scope and Sequence" also offers flexible instructional days. For example, teachers can select 180 days, 193 days, or any number within that range. A chapter-level Pacing Guide provides additional flexibility. For example, the 180-day calendar suggests that Chapter 1 be completed in 16 days, whereas 17 days are recommended for the chapter when using a 193-day calendar.

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

Each chapter of the interactive edition begins with "Then," "Now," and "Next" sections that connect prior knowledge to current and future learning. For example, Lesson 1-1: "Points, Lines, and Planes," features planning information that traces the TEKS, indicating that "Then" addresses 8.7, "Now" covers G.4A, and "Next," G.6A. These sections also include written explanations for conceptual continuity.

The "Chapter Progression" of *McGraw-Hill Texas Math Geometry* explains the rationale for topic grouping and sequencing throughout the course. For example, Chapter 3 focuses on similarity, comprising Chapter 7: "Proportions and Similarity," Chapter 8: "Right Triangles and Trigonometry," and Chapter 9: "Transformations and Symmetry."

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

The materials include lesson internalization for teachers to understand and prepare thoroughly to teach a chapter . The Teacher Dashboard features the "Texas Math 6–12 Lesson Internalization Protocol," which provides key questions to consider and steps for understanding the content and pedagogy before teaching. Chapter 10, for example, promotes lesson internalization by stating: "A circle is the locus of all points equidistant from a given point..." and emphasizing concepts such as chords, diameters, radii, and proportional reasoning.

The Instruction tab provides an "Intervention Planner" to guide instructional responses based on student performance. For example, for Tier 1, On-level, "If students miss about 25% or less, use Lesson 8-2, Skills Practice, Chapter Project, or Self-Check Quiz." For Tier 3, Intensive, "If students are significantly behind, utilize Math Triumphs, additional examples, or homework support from earlier chapters."

The Texas Math 6–12 Chapter Internalization Guide provides a four-step protocol to help teachers prepare for instruction. For example, in the first step, teachers identify the chapter's purpose. The teachers are told where to find the chapter's placement in the course: "Use the Texas Math 6–12 Chapter Order Rationale for the appropriate course to understand the chapter's role in the curriculum sequence."

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

The Texas Math 6–12 Lesson Internalization Guide for Instructional Leaders provides a five-step process to support teachers in the effective use of the curriculum. For example, Step 1 of the guide suggests that as teachers summarize the lesson's purpose and objectives, they should annotate key mathematical concepts and skills students should master by the end of the lesson. In Step 4, "Organize and Rehearse with Teachers," teachers provide feedback during rehearsals of lesson components ("Launch," "Teach the Concept," or "Practice and Apply"), focusing on teacher delivery, pacing, and engagement strategies.

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.

Each chapter In the Teacher Dashboard contains expandable sections called *blades*, which provide additional content and support for academic vocabulary. For instance, Chapter 4: "Congruent Triangles" offers mathematical background for the teacher. One excerpt explains: "Triangles can be classified based on their angle measures or the number of congruent sides. The Angle Sum theorem states that the sum of the measures of the interior angles of a triangle is always 180 degrees."

Each chapter in the eBook chapter starts with mathematical background information and key academic vocabulary. Chapter 4's "Get Started on the Chapter" lists the "Key," "New," and "Review Vocabulary." The "Key Vocabulary" for this chapter includes *isosceles triangle*, while *equilateral triangle, equiangular triangle, isosceles triangle,* and *scalene triangle* are "New Vocabulary." The "Review Vocabulary" includes terms such as *alternate interior angles*, *consecutive interior angles*, and *corresponding angles*.

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

The materials offer family support in both English and Spanish via the "GEO HS Family Letter" document for each chapter, which details what the students will be covering in each chapter. For example, the Chapter 1 family letter explains that the student will explore the foundational concepts of geometry, including points, lines, planes, and angles.

The "GEO HS Family Letter" includes the section "How you can partner with your student," which provides guiding questions parents can ask and strategies to use when students are stuck or unsure of what to do. For example, in Chapter 1, a parent might ask a student, "What do you already know about this problem?"

A "Family Letter" is also provided in English at the beginning of the school year. This letter provides general strategies for supporting students when they encounter difficulties, rather than offering specific guidance for individual chapters. The letter suggests asking questions to understand the student's thought process, moving on to a different problem that interests them, or watching the *Personal Tutor* videos.

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).

Materials contain a "Planning Information" section along with the course's "Organize," "Instruction," "Assess," and "Practice" components. These sections include pacing, TEKS, objectives, "Essential Questions," and a "Skills Trace" that outlines the connections to TEKS using the "Then," "Now," and "Next" framework. For instance, Lesson 4-1 is designed to be completed in one day and focuses on TEKS G.5(A). The objective for this lesson is to identify and classify triangles based on their angle measures and side lengths. Suggested essential questions for this lesson include "How can you compare two objects?" and "How can you determine if two objects are congruent?"

Materials offer guidance and recommendations on the suggested timing for various lesson components, such as the duration for launching, teaching, practicing, and assessing. The "Lesson Cycle" document breaks down each component for teachers, providing clear expectations for each stage.

Each "Lesson Overview" lists all required materials; for example, the materials needed to complete Lesson 3-2 include an eBook, a journal or scratch paper, a pencil, and a graphing calculator.

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.

A list of required teacher and student materials is provided for each lesson at the beginning of each chapter, including details on when and how these materials support student learning.

The "Texas Math Geometry Lesson Overview" lists the teacher and student materials necessary for effective lesson delivery and completion. For example, for Lesson 1-2, students will need an eBook, a journal or scratch paper, a pencil, and a graphing calculator.

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

"Practice" in the Teacher Dashboard provides teachers with a list of lesson materials and guidance on using resources effectively during the lesson. For example, in Chapter 1, Lesson 1-1, "Extra Practice" states: "See courseware materials for students who are approaching level or for on-level students who need additional reinforcement."

The materials offer additional homework options based on student readiness levels. For example, in Lesson 3-1 of the Teacher Dashboard, "Differentiated Instruction" provides extended practice opportunities, such as "Enrichment-Spherical Geometry."

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 materials include a variety of instructional assessments at chapter and lesson levels that vary in types of tasks and questions. These include prerequisite practice to activate prior knowledge, independent practice problems, and open-ended questions to assess learning during the lesson, as well as checks for understanding to gauge comprehension at the end.

Each chapter of *Texas Math, Geometry* includes various types of assessments. Students have the opportunity to complete a self-check quiz in each lesson. For example, Lesson 5-4 contains a five-question self-check quiz that includes multiple-choice, open-ended, and essay questions.

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

"Assessment Guidelines" define the types of instructional assessments included within the resource. For example, the materials define formative assessments and their purpose of informing instruction, helping educators and students adjust, identifying misconceptions, gauging progress, and guiding instructional decisions.

The "Assessment Guidelines" also outline the type of assessment activity, its purpose, administration guidance, how to use the results, and the format type. For example, "Self-Check Quizzes" allow students to evaluate their understanding of a lesson. These quizzes can be administered after the lesson, allowing teachers to adjust their instruction or provide additional support or enrichment based on the results.

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

The materials include teacher guidance for accurate administration that aligns with the intended purpose of each assessment, ensuring that it measures what it was designed to measure. For example, "Chapter Readiness Quizzes" at the beginning of each chapter and "Knowledge Checks" ensure that students understand the material as it is taught. At the end of each chapter, "Chapter Projects" and "Chapter Tests" ensure that students have mastered the content covered in the chapter.

The assessments provide insights into students' knowledge and skills when administered correctly. For example, results from the "Mid-Chapter Test" can help teachers identify which concepts from the first half of the chapter need reinforcement.

The materials include the document "Texas Assessment Guidelines," which provides tools for students to track their own progress and growth. For example, students can use the pie graph following an "Initial Knowledge Check" to check their progress.

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

Materials include diagnostic, formative, and summative assessments aligned to the TEKS for every chapter. For example, Chapter 3 includes a diagnostic assessment at the beginning of the chapter, formative assessments such as discussion questions throughout the chapter, and summative assessments, such as a chapter test, at the end of the chapter, that are all aligned to the TEKS covered in the chapter: G.2B, G.2C, G.5A, G.5B, and G.6A.

The materials consist of various formative assessments aligned to the TEKS of the chapter or lesson. For instance, Chapter 5, Lesson 5-3 features a self-check quiz and Practice Exercises 1–7 corresponding to TEKS G.6D.

The materials indicate how summative assessments align with the TEKS. Each assessment item includes a label featuring the corresponding TEKS. For instance, every question on the Chapter 5 "Summative Assessment Form 1" is marked with its corresponding TEKS aligned to the chapter: G.5A, G.5C, G.5D, G.6A, and G.6D.

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

Each chapter contains an "Intervention Planner." TEKS-aligned instructional assessments varying in levels of complexity are included in the materials; for example, in Lesson 7-1, differentiated homework options include Basic (10-30, 44, 46-54), Core (11-37 odd, 38-44, 46-54), and Advanced (31-54). A "TEKS Levels Complexity Chart" is provided, with Level 1 (10-30), Level 2 (31-42, 50-54), and Level 3 (43-49).

The materials include formative and summative assessments with multiple-choice, text-entry, and open-response items aligned to the TEKS. For example, the Chapter 6 "Summative Assessment" consists of multiple-choice, open-ended, and essay questions, aligning with the TEKS in the chapter: G.2B, G.5A, G.5C, and G.6E.

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.

Each chapter includes an "Intervention Planner" that provides guidance on addressing students' performance trends identified through the "Quick Check." The "Intervention Planner" describes three levels of performance. For instance, in Chapter 8, Tier 1 is designated for students who miss roughly 25% of the exercises, indicating that students are considered "On Level." Tier 2 students, classified as "Approaching Level," are those who miss approximately 50% of the exercises and require strategic intervention. Lastly, students who miss approximately 75% of the exercises are categorized as Tier 3, requiring intensive intervention.

A "Mid-Chapter Quiz" for each chapter assesses students' understanding of the content covered up to that point. Based on the quiz results, targeted guidance can be provided to address areas in which students may need additional practice. For instance, the Chapter 2 "Mid-Chapter Quiz" covers Lessons 2-1 to 2-5. The problems are organized by lesson, enabling teachers to identify precisely where to focus their support. If a student answers Question 1 or 2 incorrectly, they should review Lesson 2-1, for example.

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

The "Intervention Planner" in each chapter provides guidance for responding to students' performance trends on the "Quick Check." In Chapter 4, for example, if students miss no more than 25% of the exercises, they have their choice of Lessons 4-2 and 4-3 "Skills Practice Chapter 4," "Chapter Project," and/or "Self-Check Quiz." Students who miss approximately 50% of the exercises choose from the "Study Guide and Intervention for Chapter 4," "Extra Examples," and/or "Quick Review Math Handbook." If students miss roughly 75% of the exercises, they use "Math Triumphs," "Extra Examples," "Personal Tutor," "Homework Help," and/or "Review Vocabulary."

The materials include a targeted tool to improve specific areas where support is needed. The "Initial Knowledge Check" in *ALEKS* offers content along with diagnostic and progress monitoring assessments to guide instruction. *ALEKS* helps teachers identify the individual support required for each student, offering resources to reinforce and build students' knowledge.

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

The materials include customizable reports that enable teachers to track student progress. The teacher can monitor student performance on each activity in the "Activities" view; a color-coded legend indicates student performance: red = 0-59%, orange = 60-69%, purple = 70-79%, green = 80-89%, and blue = 90-100%. Using the "Standards" view, the teacher can track "Domain Performance Over Time," "Domain Details," "Standards to Focus On," and "Standard Details."

The eBook includes a student self-tracker, "Track Your TEKS Progress," in which students rate their knowledge before and after learning each skill. For example, for TEKS G.5(B), students can rate their understanding as "I have no clue," "I have heard of it," or "I know it!"

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 materials include teacher guidance for differentiated instruction for students who have not yet achieved proficiency in grade-level content and skills. For example, Lesson 6-1, Example 1 provides a hands-on approach to finding the interior angles of a polygon, in which students use a straightedge and protractor to create an irregular polygon and then trade it with a partner. Example 2 also provides differentiated instruction for Emergent Bilingual (EB) students by recommending the use of a Card Ring identifying various polygons and their characteristics.

The materials include scaffolding questions. For example, Lesson 5-1, Example 1 provides questions for students who are at AL (Approaching Level) versus questions for OL (on level) or BL (Beyond Level) learners.

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 pre-teaching supports for unfamiliar vocabulary and references found in the text. For instance, the "Student-Built Glossary" appears at the beginning of each chapter; in Chapter 6, students add vocabulary words such as *base, diagonal*, and *isosceles trapezoid* and are required to cite the page of text in which each word was found, providing a definition, description, and example for each term.

The materials include references in the text for unfamiliar terms. For example, the Lesson 8-5 homework assignment references a Ferris wheel, the game of darts, and the Akashi Kaikyo Bridge, providing visuals to support students with the assignment.

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 materials provide teacher guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content. For example, in Lesson 6-1, Example 1, a teacher can ask questions for OL (On Level) or BL (Beyond Level) students, which differ from those for AL (Approaching Level) students. AL students might be asked "What is an interior angle of a polygon?"; OL, "What would be the sum of the measures of the interior angles of a convex decagon?" and BL, "If a regular convex polygon has an interior angle sum of 180 degrees, what is the polygon?"

The materials include guidance for enrichment and extension activities. For example, the teacher can differentiate homework tasks by giving students who demonstrate proficiency in grade-level content the core assignments (12-38, 54, and 55) or choosing the advanced assignments (39-55).

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 detailed prompts and guidance to help teachers explain the concepts that need to be learned. For instance, the materials highlight potential misconceptions: a student might mistakenly believe that the longer leg of a triangle is twice the length of the shorter leg. It also suggests providing counterexamples using 30-60-90 triangles to clarify this misunderstanding.

The materials include teacher guidance in the "Teacher Notes" section, such as scaffolding questions, problem-solving strategies, and teaching tips to support effective learning. For instance, Lesson 8-3, Example 4, contains prompts tailored to students at various readiness levels: Approaching Level (AL): "What do we know about the angle measures of the crayons from the given information?", On Level (OL): "If the base of the box for jumbo no-roll crayons is 4 inches, what are the dimensions of each jumbo no-roll crayon?", and Beyond Level (BL): "If you had sixteen isosceles right triangle crayons, what shape box would you use? Explain."

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

The materials include teacher guidance and recommendations for effective lesson delivery and facilitation using various instructional approaches. For example, Lesson 8-3, "Special Right Triangles," offers direct instruction, guided practice, scaffolding questions, real-world application tasks, differentiated instruction, and visual supports.

The material provides recommended effective lesson delivery strategies for teachers during instruction. For example, in Lesson 1-1's "Critical and Creative Thinking Problems," students are provided opportunities to justify arguments and write about the concepts.

The materials include guidance on effective lesson facilitation. For example, the "Corequisite Workbook" exercises at the beginning of each chapter should be used to evaluate students' understanding of essential skills needed for the chapter.

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 materials include guidance for teachers to support effective implementation. The guidance is provided through "Teaching Tips," "Problem-Solving Tips," and "Think Alouds." For example, Example 1 in Lesson 8-2 models a "Think Aloud" in which the teacher can discuss side lengths and emphasize that Pythagorean triplets are not the only possible side lengths for a right triangle. The text mentions triangles in which all the lengths are whole numbers, but the side lengths could be any real numbers.

The materials provide support for multiple practice types. In each lesson of the book, the instructor has the option to differentiate instruction with "Activities for Every Learner." For example, in Lesson 3, guidance is provided to apply the concepts, followed by a brief review of previous concepts. This is then followed by guided practice in Lesson 3-1, Example 1 and, finally, the "Think About It" section.

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 materials include teacher guidance on providing linguistic accommodations tailored to various levels of language proficiency. Each lesson identifies the English Language Proficiency Standards (ELPS) in "Differentiated Instruction" of the "Teacher Notes," with specific supports for different language proficiency levels. For example, Lesson 8-2: "Pythagorean Inequality Theorems," provides guidance for Beginner, Intermediate, Advanced, and Advanced-High students. The tasks are designed to promote increasingly complex language use. For example, Beginner students are encouraged to speak a word or phrase aloud, follow teacher modeling, and complete simple note-taking. In contrast, Advanced-High students summarize concepts, solve problems in pairs, and share their responses through oral presentations.

In addition, Chapter 11 begins with the ELPS, new and reviewed vocabulary in both English and Spanish, and visual representations of the terms. Lesson 11-3, Example 3 offers specific guidance to support verbal and linguistic learners: Teachers are prompted to have students discuss how the area of a sector relates to the area of an entire circle, and write about how the equation for a sector logically represents a portion of the circle.

The "Geometry EB Supports" document outlines five proficiency levels, describing each level's characteristics and what students can do. The document also provides directions on how to use the ELPS and how to bridge language and math, suggesting, for example, that teachers "highlight and explicitly point out cognates during whole group instruction and discussions."

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

The "Geometry EB Supports" document provides support for Emergent Bilingual students at all proficiency levels, from pre-production to advanced. For example, a suggested strategy in Chapter 2, Lesson 3 is to highlight cognates and incorporate them into the lesson to help EBs make linguistic transfers.

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.

"Differentiated Instruction" in the "Teacher Notes" of the eBook includes embedded guidance for teachers to support Emergent Bilingual students in enhancing comprehension through oral and written discourse. For example, Lesson 8-2 includes support for introducing the Pythagorean theorem. The tiered guidance helps students grasp academic content through various discourse forms. Beginning and intermediate students listen to the lesson opener one sentence at a time to identify or repeat key information. Advanced students listen without taking notes and discuss what they heard to strengthen oral comprehension. Advanced-High students take notes while listening, write summaries of the problem and solution, and then share insights with peers, reinforcing comprehension through written discourse.

The materials include embedded guidance for teachers to support EBs in building background knowledge through oral and written discourse. For example, Lesson 1-3, Problem 55 includes a "Teacher Tip" suggesting that the teacher use this problem as a homework discussion starter for the next day's opening activity to build on the knowledge learned. Problem 56 in the same lesson prompts teachers to encourage students to use clear mathematical language when describing their construction.

The materials include guidance for teachers to support emergent bilingual students in acquiring academic vocabulary through oral and written discourse. In Lesson 8-7's "Preparing for Assessment," teachers are instructed to have students practice naming parts of vectors and explaining the concept verbally. Teachers are also provided with guidance and a worksheet to help students create their own glossary of academic vocabulary words for each chapter.

The "Geometry EB Supports" document makes cross-linguistic connections through oral and written discourse by embedding cognates and bilingual vocabulary into lesson activities. In Chapter 3, Lesson 3, students work in groups to create Anchor Charts in their native language, illustrating the vocabulary concept of *slope* and its different representations for reference throughout the lesson. In Chapter 4, Lesson 4, students write a short explanation about SSS or SAS in their native language, then translate it to give feedback. Students are also given sentence stems such as "I think __ is easier in real life because ___" to support writing in complete sentences.

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.

Practice opportunities within lessons allow students to demonstrate their depth of understanding of grade-level TEKS. For example, in Chapter 2, Lesson 2-1, students are given a practice opportunity to show their understanding, starting with Exercises 1 and 2, in which they learn how to construct perpendicular lines. By analyzing the results from these exercises, students progress from concrete to abstract learning about arc intersections that align with TEKS G.5B.

Instructional assessments that align with the depth of understanding required by the TEKS must provide accurate data on students' grade-level proficiency, which is included in the materials. These assessments enable educators to make informed instructional decisions and tailor support to meet the unique needs of each student. For example, Chapter 3 includes a 10-question quiz that requires students to demonstrate a depth of understanding aligned with the TEKS for that chapter: G.2B, G.2C, G.5A, G.5B, and G.6A.

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

The questions and tasks increase in rigor and complexity, leading to proficiency in the TEKS. For example, Chapter 1, Lesson 1-1 begins with basic information regarding the topic, followed by examples and a check for understanding, then transitions into practice, problem-solving, and critical and creative thinking.

The materials include group projects in which students collaborate on progressively challenging questions to achieve proficiency in the TEKS. For instance, the Chapter 2 group project requires students to demonstrate their understanding of conditional statements. This assessment gradually increases in complexity, offering opportunities for research as well as the analysis, creation, and evaluation of conditional statements in real-world business situations. The questions and tasks become more complex,

allowing students to showcase a deeper understanding of the TEKS covered in this chapter: G.2B, G.2C, G.5A, G.5B, and G.6A.

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 materials include a "Scope and Sequence," with chapters connected by common themes. The themes are as follows: "Chapter 1: Geometric Structure," "Chapter 2: Congruence," "Chapter 3: Similarity," and "Chapter 4: Measurement." In "Chapter 4: Measurement," students begin by exploring circles in Chapter 10. Students then connect this knowledge to the area of polygons and circles in Chapter 11, extend to surface area and volume in Chapter 12, and conclude with probability and measurement in Chapter 13. Additionally, chapter-level "Essential Questions" connect learning across lessons. For instance, in Chapter 10, the essential question is "How are circles used?"

The materials are consistent across the chapters; each includes a lesson planning section that identifies the TEKS and explains how students relate to skill development. In Chapter 5, Lesson 1, students build upon their previous knowledge of constructing angles using a compass and straightedge. Next, students investigate the theory underlying these constructions and prepare to formulate conjectures about geometric relationships in the special segments of triangles.

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 materials include "Then, Now, and Next" standards that connect previously learned topics to what students will learn later in the lesson or chapter. For instance, Chapter 10 of the interactive edition references prerequisite skills from the eighth-grade standard 8.2(B), which involves approximating the value of irrational numbers, including π. These skills support the current geometry standards, G.12(A), G.12(B), and G.12(C), in which students apply theorems about circles and use proportional relationships to solve problems. The importance of this concept is further emphasized by linking it to future topics in later courses, such as Algebra II, in which students analyze functions that involve irrational values and transformations.

The materials feature a review chapter that addresses content from previous courses or grade levels, which is essential for understanding the current course. For instance, Chapter 0 covers concepts such as

algebraic expressions, linear equations, and ordered pairs, all of which are necessary for grasping upcoming concepts in Geometry.

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 materials demonstrate coherence across chapters through the "Then, Now, and Next" standards review structure, which explicitly connects prior learning, current concepts, and future applications. For example, in "Then," Lesson 10-1, students proved properties of quadrilaterals using logical reasoning and by exploring the relationships among sides, angles, and diagonals (G.6E). "Now" students apply similar reasoning skills and spatial analysis to understand theorems about circles, such as the angles and segments formed by chords and tangents (G.12A). "Next," these skills progress to proportional reasoning involving arc lengths and circumference, which deepens their understanding of geometric measurement and relationships (G.12B).

The "Mathematical Background" section at the beginning of each chapter helps connect previously learned concepts and skills to the new topics being introduced. For instance, in the Chapter 3, "Mathematical Background" includes an example of how slope can be used to explore geometric concepts related to parallel and perpendicular lines.

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 opportunities for spaced retrieval of previously learned concepts across lessons and chapters. The "Scope and Sequence" indicates that the Chapter 3 subject is similarity, in which students explore proportions, trigonometry, and transformations. "Essential Questions" support retrieval by progressing from how two figures can be similar to why symmetry is desirable. At the lesson level, students begin by learning about ratios and proportions, then apply these to similar polygons, and later, to similar triangles. These conceptual understandings are revisited in later chapters, such as when students study measurements, applying the concept of similarity to solve problems involving scale and surface area.

The materials offer opportunities for spaced retrieval of previously learned skills and concepts throughout various lessons and chapters. The "TEKS Correlation Guide" outlines where the TEKS are covered across multiple lessons and chapters. For instance, G.4A is included in Lessons 1-1, 2-1, and 2-5.

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

The "Mid-Chapter Test" and "Chapter Resource Master" (Forms 1-3) focus on interleaving questions at the chapter level. For example, students practice vocabulary learned in Lesson 10-1 by identifying the longest chord in a circle and finding central angles related to the arc given during the "Mid-Chapter Test" in Lesson 10-3 of Chapter 10. The materials provide opportunities for interleaved practice by incorporating previously learned skills and concepts within the "Performance Tasks." For example, Chapter 2, "Task: Triangle Design," focuses on concepts such as supplementary angles, complementary angles, angle bisectors, and intersecting lines. These concepts, which were learned earlier, are applied to proofs in this task.

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.

The materials include questions that require students to interpret, analyze, and evaluate models and representations for mathematical concepts and situations. In Lesson 3-3, Example 1D, "Student Guide," students analyze a city plan and justify their responses, and Example 2D asks students to evaluate the reasonableness by using a graph to check.

The materials include "Geometry Labs" that require students to interpret, analyze, and evaluate models and representations for mathematical concepts. For example, in Lesson 5-1: "Construction Bisectors," students make two constructions of an acute scalene triangle with patty paper. During this activity, students interpret the constructed lines and what each part of the triangle represents: "Construct the perpendicular bisectors..." "Draw a point on AB and compare the distance..." Students break down parts of the triangle and analyze and evaluate the geometric properties: "Make a conjecture about the intersection..."

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

Tasks in the materials provide students with opportunities to create models representing various mathematical situations. For instance, Lesson 3-4, Practice 1A of the "Student Guide" prompts students to develop a model of a chairlift to derive the equation of the line based on the given scenario.

"Geometry Labs" encourage students to create models representing mathematical concepts. For instance, in Lesson 5-1: "Constructing Bisectors," students are tasked with constructing geometric models by creating perpendicular and angle bisectors of triangles. After completing these constructions, students can observe and compare the differences between the bisectors within the same triangle.

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

Questions and tasks in the materials provide opportunities for students to apply conceptual understanding to new problem situations and contexts. For example, in the "Student Guide," Lesson 3-6, Example 1, students construct a perpendicular bisector and make conjectures about points on it.

"Geometry Labs" require students to apply their understanding of concepts. For example, in Lesson 5-1's "Perpendicular Bisectors Lab," students use their knowledge of bisectors to construct and make conjectures about "Triangle MPQ" and "Triangle ABC" in the first task. The second task challenges students to explore the relationships between distances using their constructions, prompting them to apply new information to a problem situation. This approach provides students with the opportunity to discover concepts before formally learning the theorems in Lesson 5-1.

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 student automaticity and fluency; for example, in Lesson 3-4, Example 6, students use automaticity and fluency to accurately and efficiently determine the best option for purchasing a tablet by modeling linear equations. The task requires students to be fluent when writing and solving linear equations in a problem-solving context.

The materials demonstrate automaticity in the Chapter 8 "Readiness Quiz" through the review of properties of square roots that will appear later in the chapter. For example, students practice simplifying the square root of 45 and rationalizing the denominator. These skills are applied in Lesson 8-3 when students work with special right triangles and square roots.

The materials provide skills practice worksheets that contain question items that are designed to build student automaticity and fluency necessary to complete grade-level tasks. For example, in Lesson 6-2, the "Skills Practice" provides an opportunity for students to build automaticity and fluency in solving for variables within quadrilaterals.

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.

Lessons provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures. "Critical and Creative Thinking Problems" in each lesson enable students to practice mathematical procedures. For example, in Lesson 8-3, Problem 46, students are given an error analysis problem and must evaluate which method is correct, demonstrating the application of accurate mathematical procedures. Problem 49 allows for flexibility, as students are given a triangle with specified angle ratios and are tasked with determining the perimeter. For Problem 50, students determine efficient mathematical procedures by justifying why some right triangles are considered special.

Additionally, in Lesson 3-5, students practice applying the concept of parallel lines to prove that lines are parallel.

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

The materials provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson and throughout the chapter. For example, "Critical and Creative Thinking Problems" in Lesson 8-5 provides opportunities for students to evaluate efficiency, flexibility, and accuracy in problem-solving. Tasks such as estimating height using the angle of elevation, writing guiding questions, and analyzing misconceptions about angle relationships provide opportunities for evaluating solutions with flexibility.

The materials provide students with the opportunity to evaluate procedures and processes throughout the lesson. For instance, in Lesson 5-4: "Problem Solving," students are given tasks that require them to write different types of proofs. Students follow the outlined procedures to create these proofs effectively.

The materials identify TEKS emphasized, and questions increase in steps. For example, in Lesson 7-4: "Extend Thinking: Enrichment," students analyze and compare worked problems using various approaches to proving triangle congruence. Students are prompted to evaluate the efficiency of each solution strategy: "Does the transformation above appear to be a congruence transformation? Explain your answer."

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

The materials contain embedded supports for teachers to guide students toward increasingly efficient approaches. For example, in Lesson 8-3, Example 4, students are asked to determine the dimensions of triangular crayons that fit into a prism-shaped box. Students use geometric reasoning, make guesses, and apply 30-60-90 triangle relationships to calculate the height of each crayon and determine whether the arrangement fits 16 total crayons. The problem is broken down into a five-step problem-solving method.

The materials include embedded supports to guide teachers in helping students adopt efficient approaches. For example, in Lesson 5-1, listed steps lead students to efficient approaches to writing proofs.

The materials contain embedded supports for teachers to guide students toward increasingly efficient approaches. For example, in Lesson 4-4, embedded prompts guide students to recognize the slope formula as a more efficient method. Side notes in the Teacher Guide include questioning strategies such as "What do you notice about the pattern of change in the y-values?" "What do you notice about the pattern of change in the x-values?" These questions lead students to understand the concept of slope using the slope formula.

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 eBook outlines how the conceptual and procedural aspects of the TEKS are addressed in each lesson via lesson overviews highlighting these emphases. For instance, in Lesson 8-1: "Geometric Mean," conceptual understanding is reinforced in the "Why?" section, which uses a real-world context related to photography to demonstrate the application of the geometric mean. The procedural emphasis aligns with the TEKS, specifically G.8(B), in which students are expected to identify and apply relationships involving the geometric mean to solve problems.

The materials outline how the conceptual and procedural aspects of the TEKS are integrated within each chapter, starting with the section "TEKS Skill Development," which explains what will occur during the lesson and what is expected afterward. The "Essential Questions" provide further insight into the reasoning behind the lesson and its application. Chapter 3 discusses the importance of undefined terms and their practical use, for example.

Lesson 3-3, Question 5, "Word Problem Practice," explains how students will learn to find the slope and equation of a line to determine whether a quadrilateral on the coordinate plane is a rectangle, square, or rhombus. By calculating the slopes of the sides, students can identify parallel and perpendicular lines, which helps them distinguish differences among these shapes.

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 "Scope and Sequence" provides a brief overview, identifying where and how manipulatives, pictorial representations, and abstract representations will appear in a given chapter through the listed objectives. For example, in Chapter 8, three labs are available for students to explore right triangles and trigonometry. In Lesson 8-2, students use tracing paper and a ruler to explore proofs without words, providing an opportunity to work with manipulatives. In Lesson 8-4, students use Desmos or other geometry software to visually explore secant, cosecant, and cotangent functions, offering a pictorial representation. Finally, students engage with abstract representations by using trigonometric ratios in Lesson 8-4 and vectors in Lesson 8-7 to solve problems.

Chapter 10, Lesson 10-6 recommends using Geometer's Sketchpad, which offers visual representations, symbolic notations, numeric expressions, and algorithms. For instance, when determining the measures of central and inscribed angles, interactive visual tools enable students to draw and manipulate different parts of a circle. This hands-on approach helps them visually explore and understand the relationships between the angles and the components of the circle.

In Lesson 6-1, Example 1, "Find the Interior Angle Sums of Polygons," materials provide tables and figures of various polygons, and in the differentiation section, students are directed to use concrete materials such as a straightedge to construct an irregular polygon and a protractor to measure the angles.

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.

"Geometry Labs" help students define and explain concrete and representational models with abstract concepts. For example, in the "Geometry Lab" for "Explore 8-2: Proof Without Words," students prove the Pythagorean theorem using unlabeled diagrams. The "Ask" section of "Scaffolded Support" prompts students to reason about an area using manipulatives and provides a sample explanation for verifying equivalence by arranging triangle cutouts, linking the physical model of geometric shapes and area decomposition to the conceptual understanding of the Pythagorean theorem. In the "Assess" section, students summarize what students have learned about the Pythagorean theorem, and in the "From Concrete to Abstract" section, students connect the concrete example of measuring and comparing side lengths on a triangle to the abstract concept of solving for unknown side lengths using the equation.

The materials include Geometer's Sketchpad questions that encourage the use of visual representations, symbolic notations, numeric expressions, and algorithms. For example, in Lesson 10-6, when finding the measures of central and inscribed angles, interactive visual representations allow students to create and manipulate parts of the circle, helping them visually explore and understand the relationships between the angles and the circle's components.

The materials offer students a chance to bridge the gap between concrete and abstract concepts in Lesson 5, "Explore 5-5: Graphing Technology Lab." In the "Assess" section, students are instructed to draw a triangle, then swap drawings with a partner. Students will find the lengths of the triangle's sides and subsequently write inequalities to express the relationships between those lengths.

In Lesson 1-5's "Geometry Lab," students connect models to abstract concepts in the "Assess" section, where they use a student-created model to make conjectures about the formed triangle.

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 materials offer visual supports to help develop academic mathematical language, such as the Lesson 9-3 diagrams labeled with key terms including *angle of rotation* and *center of rotation*. The diagram also uses color coding to help students visually associate vocabulary with the diagrams; angle A and the descriptive phrase *is the image of* are highlighted in green.

In Lesson 9-3, "Geometry Lab," students engage in an interactive tracing paper activity using manipulatives to rotate figures and compare distances. Throughout the lesson, students use academic vocabulary to label concepts precisely and apply terms such as *quadrilateral, point, rotate*, and *image notations*.

For the "Student-Built Glossary," students define new vocabulary, providing examples and asking questions to elicit new vocabulary. For example, new vocabulary for Chapter 9's "Student-Built Glossary" includes *line of reflection* and *angle of rotation*.

Geometer's Sketchpad materials include questions that encourage the use of visual representations, manipulatives, and other strategies. For example, when finding the measures of central and inscribed angles, interactive visual representations allow students to draw and manipulate parts of the circle, helping them visually explore and understand the relationships between the angles and the circle's components.

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

Chapter 9 includes embedded teacher guidance for the "Key Vocabulary" section, which outlines a three-step structured routine of "Define," "Example," and "Ask/Answer." For instance, a definition of the *center of rotation* is provided with a diagram that includes labeled points. After presenting the definition and diagram, the teacher is prompted to ask, "What point is the center of rotation?" The answer is included for reference.

The "Student-Built Glossary" in each chapter also serves as embedded teacher guidance by clearly instructing teachers on what students should do, when students should do it, and how. For instance,

teachers are directed: "Students should complete the 'Student-Built Glossary' by writing the definition of each term and an example as students work through Chapter 9."

The materials offer teacher guidance to support students' use of academic mathematical vocabulary. For example, Lesson 2-3 of the eBook offers strategies for implementing vocabulary usage within an "Interactive Question-Response" framework. The suggestions are tailored to meet the needs of beginner, intermediate, and advanced learners, ensuring that all students can engage with the content at their appropriate levels.

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 "Key Vocabulary" section provides a structured routine for teachers to guide and support the application of mathematical conventions. For example, in Chapter 9, the definition of *center of rotation* is explicitly given to support academic vocabulary related to transformations.

Practice problems include embedded teacher support to encourage mathematical discourse in the classroom. For example, in Lesson 9-1, Exercises 16 and 17 include an extension that prompts students to discuss and collaborate with a partner on how reflections can be used to create a perfect miniature golf course. This project offers students the opportunity to hear academic math language from their peers and refine their understanding by working collaboratively and incorporating group feedback into their golf course designs.

The "Teacher Notes" provide discussion prompts such as those found in Chapter 8. Students engage in structured discussions based on prompts including "How can we use the Pythagorean theorem to find the missing side of a right triangle?" Students also use sentence stems such as "Since the sum of the squares of the legs is equal to the square of the hypotenuse, we can write the equation as __ = __." The Teacher Guide includes example responses to help students transition from informal reasoning to more formal mathematical thinking.

5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	All criteria for guidance met.	2/2
5.5c	Materials do not include a description for each chapter of how TEKS process standards are connected throughout the chapter.	1/2
5.5d	All criteria for guidance met.	1/1
—	**TOTAL**	5/6

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

The TEKS process standards are included throughout the eBook, and embedded guidance is provided for teachers to support implementation in the "Teaching the Mathematical Process" notes. For example, one of the process standards identified in Lesson 9-1 is G.1(E), which requires students to create and use representations to organize, record, and communicate mathematical ideas. "Teacher Notes" for Exercise 50 prompt the teacher to direct students to draw a sketch of the situation described, promoting them to create a representation and communicate their findings with others.

The "Scope and Sequence" indicates when the TEKS and TEKS process standards are integrated into the course. The TEKS process standards are listed at the beginning of each chapter; for example, Chapter 1 includes G.1(A), G.1(B), G.1(C), G.1(D), G.1(E), G.1(F), and G.1(G) process standards.

The TEKS Standards Correlation Guide shows that the TEKS process standards are incorporated and connected throughout the course, with each standard embedded across multiple lessons and chapters. For example, G.1(D) is located in Lessons 2-7, 3-4, 4-2, and 8-2.

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

The TEKS Standards Correlation Guide shows that the TEKS process standards are incorporated and connected throughout the course, with each standard embedded across multiple lessons and chapters. For example, G.1(E), which involves students creating and using representations to organize, record, and communicate mathematical ideas, is used in Lessons 1-5, 3-1, 4-4, and 7-6.

The "Scope and Sequence" indicates when the TEKS and process standards are integrated throughout the course. The TEKS process standards are listed at the beginning of each chapter. Chapter 2 includes G.1(A), G.1(B), G.1(C), G.1(D), G.1(E), G.1(F), and G.1(G) process TEKS, for instance.

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

The materials include a description for each chapter of how the TEKS process standards are incorporated throughout the chapter. At the beginning of each lesson, the TEKS process standards are listed and defined. For example, Lesson 9-1 includes G.1(C) and G.1(E), while G.1(B) and G.1(E) are also referenced.

The TEKS Standards Correlation Guide identifies the locations of all TEKS process standards throughout the chapter. For example, TEKS process standards G.1(A), G.1(B), G.1(C), G.1(D), and G.1(E) are located in Lessons 1-5, 2-8, 3-2, and 4-3.

Each chapter includes the TEKS process standards that will be addressed within the lessons and labs for the chapter. For example, Chapter 5 addresses the TEKS process standards G.1(A), G.1(B), G.1(C), G.1(D), and G.1(E) in the lessons and labs.

Materials do not include a description for each chapter of how TEKS process standards are connected throughout the chapter.

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

The materials include an overview of the TEKS process standards incorporated into each lesson in the TEKS Standards Correlation Guide. For example, G.1(A) is located in Lessons 1-3, 3-3, 6-1, 8-1.

The materials include an overview of the TEKS process standards incorporated into each lesson. For example, in Chapter 11, Lesson 11-1, the TEKS process standard incorporates G.1(D) within the "TEKS Skill Trace," "TEKS Tracker," and "Unpacking the TEKS."

The materials include an overview of how the TEKS process standards are incorporated into each lesson. At the beginning of each lesson, the TEKS process standards are listed. For example, Lesson 5-5 incorporates TEKS process standards G.1(E) and G.1(G).

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.

Each chapter includes at least two performance assessments that provide students with opportunities to think mathematically, persevere through problem solving, and make sense of mathematics. For example, Chapter 8's "Review and Wrap-Up," includes "Performance Task 1," which asks students to evaluate and justify three mathematical methods for determining the height of a building.

Students use various strategies to solve problems. For example, in Chapter 8, students practice finding missing triangle measurements using the geometric mean. Students justify their answers by applying proven theorems. Teachers are instructed to have students "think and write about why the geometric mean formulas work for triangles."

The materials provide opportunities for students to persevere through problem-solving and make sense of mathematics. For example, in Exercise 4 in Lesson 7-1's "Guided Practice," students are asked to think mathematically and solve a problem involving ratios and proportions to determine the number of tagged butterflies out of 100, given the ratio of 48 caught to 3 tagged.

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

"Performance Task 1" of the Chapter 8 "Review and Wrap-Up" presents three different mathematical representations: a proportion comparing shadow lengths (Part A), a trigonometric setup using two angles of elevation (Part B), and a tangent ratio equation (Part C). The task includes three distinct solution methods to determine the height of a building, using proportional reasoning, algebraic manipulation of tangent equations, and direct application of trigonometric ratios. Students solve the problems in multiple ways. They critique three different methods, explaining their thought processes through work or drawings. Each student must justify their answers and the reasoning for each approach. After guided practice, real-world examples of the geometric mean are provided, along with scaffolding questions for the teacher. A follow-up discussion prompts students to reflect on the relevance of the formula.

Students are encouraged to explain and justify various methods for representing and solving problems in the materials. For instance, in Lesson 7-1: "Problem Solving," students are tasked with determining whether the number of jobs has increased or decreased over a specific period and calculating the number of individuals who secured jobs. Students are asked to explain and justify their solutions.

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 eBook includes "Differentiated Instruction" sections to help students make sense of mathematics through multiple opportunities. For example, in Lesson 8-2: "Differentiated Instruction" provides support for students at beginning, intermediate, advanced, and advanced-high levels.

The materials give students the opportunity to do math with teachers and peers. For example, in Chapter 7, "Active Listening" is suggested for advanced-high students. Students actively listen to the teacher read the lesson opener aloud, then work in pairs to summarize the information and solve the problem.

Chapter 6 provides students the opportunity to write about math with teachers and peers at the beginning level. Students then use this model to record information in their notes. At the advanced level, students write down what they remember from the reading and compare their notes in groups.

The materials offer students the chance to engage in discussions about math with teachers and peers. In Chapter 3, which focuses on differentiated instruction at the intermediate level, the teacher encourages students to identify key information from the lesson opener. At the advanced level, students collaborate in groups to compare their notes and discuss the problem and its solution with a partner.

Chapter 7: "Apply Math in the Real World," prompts students to write a problem, solve it after realistic adjustments, and then swap with a classmate to evaluate the problem and solution.

In Lesson 7-1's "Graphing Technology Lab," students are afforded the opportunity to do math with peers and the teacher while exploring the Fibonacci sequence.

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 eBook includes "Critical and Creative Thinking Problems" that allow students to share and reflect on their problem-solving approaches. For example, Lesson 8-2, Exercise 49 is an error-analysis task that requires students to determine which proportion was used correctly. Students reflect on what they know about proportions and explain their reasoning. Teachers are prompted to remind students that proportions should compare similar parts of different triangles, supporting those who may be struggling.

Lesson 8-2: "Justify Arguments," Exercise 51, encourages students to reflect on the conditions necessary for creating a geometric mean. Students are asked to identify which two pairs of whole numbers yield a geometric mean that is also a whole number. Teacher guidance includes a sample answer and a brief explanation, noting that for two whole numbers to produce a geometric mean that is a whole number, their product must be a perfect square.

In Lesson 8-2: "Writing in Math," Exercise 53, students compare and contrast the arithmetic and geometric means of two numbers and determine when the two means would be equal. Students reflect on the difference between the arithmetic mean and the geometric mean and justify the condition under which the two values are equal. Teacher guidance is included in a sample answer that explains how to calculate both means and offers a hint that the two means are equal when $a = b$.

Exercise 36 in Lesson 9-5's "Critical and Creative Thinking Problems" prompts students to complete an error analysis and explain their reasoning. Exercise 37 provides questions to prompt deeper reflection on their understanding.

The materials provide teacher guidance to support student sharing and reflection on their problem-solving approaches. For example, in Chapter 7, "Critical and Creative Thinking Problems" includes error analysis and problem-solving approaches, as well as explanations, arguments, and justifications. Similarly, in Lesson 7-1's " Graphing Technology Lab," teachers are directed to have students share and reflect on their problem-solving approaches with the Fibonacci sequence.

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

The "Cumulative Review" offers teacher guidance and prompts for addressing student responses. For example, in Chapter 8, guidance is provided to help the teacher interpret student errors by offering insight into why an answer is incorrect: In Exercise 1, if a student selects option (b), the explanation clarifies that the student found the angle the skateboard makes with the wall, rather than the angle it makes with the ground.

The Need Extra Help tab offers teacher guidance and support, aligning missed questions with the related lesson. For instance, Question 1 in Chapter 8 refers to concepts taught in Lesson 8-4.

"Teaching Tips" embedded in lessons provide support for potential misconceptions. For example, Lesson 8-3, Example 4's "Teaching Tip" identifies a common misconception and offers specific guidance for addressing it: "A common mistake that can be made is to assume that the longer leg of a 30-60-90 triangle is twice the length of the shorter leg."

In Chapter 7, "Analyze Student Error," Exercises 36–38, teachers are given feedback for each incorrect response, such as "If a student chose (b) for Exercise 36, they did not include the length of MN in the perimeter."

In Lesson 7-2: "Identify Similar Polygons," teacher guidance is provided by the scaffolding questions based on misconceptions, student responses, and explanatory feedback in the step-by-step photo editing activity.