Texas Education Agency

English Mathematics, Geometry

Bluebonnet Learning Secondary Mathematics Geometry

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Full-Subject, Tier-1	**9781970198867**	**Both Print and Digital**	**Static**

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. Supports for All Learners	27 out of 27	100%
4. Depth and Coherence of Key Concepts	19 out of 19	100%
5. Balance of Conceptual and Procedural Understanding	41 out of 41	100%
6. Productive Struggle	22 out of 22	100%

Breakdown by Suitability Noncompliance and Excellence Categories

SUITABILITY NONCOMPLIANCE FLAGS BY CATEGORY	IMRA REVIEWERS	PUBLIC	Flags NOT Addressed by November Vote
1. Prohibition on Common Core	0	0	0
2. Alignment with Public Education's Constitutional Goal	0	0	0
3. Parental Rights and Responsibilities	0	0	0
4. Prohibition on Forced Political Activity	0	0	0
5. Protecting Children's Innocence	0	0	0
6. Promoting Sexual Risk Avoidance	0	0	0
7. Compliance with the Children's Internet Protection Act (CIPA)	0	0	0

SUITABILITY EXCELLENCE FLAGS BY CATEGORY	IMRA REVIEWERS
Category 2: Alignment with Public Education's Constitutional Goal	3
Category 6: Promoting Sexual Risk Avoidance	0

IMRA Quality Report

1. Intentional Instructional Design

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

1.1 Course-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.1a	All criteria for guidance met.	4/4
1.1b	All criteria for guidance met.	2/2
1.1c	All criteria for guidance met.	2/2
1.1d	All criteria for guidance met.	2/2
1.1e	All criteria for guidance met.	2/2
—	**TOTAL**	12/12

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

In "Course-Level Documents" under the "Scope and Sequence" tab, there are two scope and sequences, one for 150 days and one for 165 days. Each scope and sequence indicates, "1 day pacing = 45-minute session."

Each scope and sequence identifies the modules, the topics within each module, the lessons included in each topic, a summary of each lesson, and the essential ideas for each lesson. For each topic, there is a list of the Texas Essential Knowledge and Skills (TEKS) and English Language Proficiency Standards (ELPS) covered in the topic. The scope and sequence includes the TEKS for each lesson and the recommended number of days for each lesson.

The "Course-Level Documents" include a "TEKS Summary" and an "ELPS Summary"; each provides an overview of their location within each module, topic, and lesson for each specific TEKS and/or ELPS requirement.

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).

Each scope and sequence document breaks down each topic within a module into a number of lessons. For each lesson, the document provides a lesson summary along with the essential ideas of the lesson, the TEKS associated with the lesson, and the recommended pacing for the lesson. At the completion of each topic, the scope and sequence indicates the number of pacing days recommended for individual learning with skills practice and a day for an assessment.

In the "Course-Level Documents" under the "Year-at-a-Glance" tab, there are two pacing guides, one for 150 days and one for 165 days. Both pacing documents state, "1-day pacing = 45-minute session." On each pacing document, each topic is assigned a number of days for pacing and the TEKS covered in the topic. Suggested pacing includes days for End of Topic Assessments and individual learning days.

The materials include a "Year-At-A-Glance" document that includes the number of recommended pacing days. This information is consolidated at the topic level without specific lesson detail. The "Year-At-A-Glance" identifies the TEKS covered in each topic. The ELPS are included in a separate "ELPS Summary" document that ties each ELPS to a specific lesson within a topic and module. The ELPS are not included in the "Year-At-A-Glance" document.

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 "Program-Level Resources" provide a "Content Organization" document written in English and Spanish. The document details the logical sequence and connections of concepts presented as early as grade 6 through Algebra II and Geometry. It uses icons as a visual aid to show the connections between grades and courses.

Within each course module, there is a rationale that explains the benefits of the sequence of topics and highlights the connections between concepts presented throughout the course. For example, in Module 2, the document iterates that the reasoning developed within Module 2 is used throughout the rest of the course units, Modules 3 through 5, to prove geometric relationships. It then provides a logical sequence of topics to achieve the reasoning objective.

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

The "Program-Level Resources" tab includes the "Module and Topic Internalization Protocol for Teachers," which provides a step-by-step process for understanding each module and topic prior to teaching, including what students will learn, how teachers will assess student learning, and the high-level arc of learning. By starting with the module and topic internalization, teachers can understand how each lesson fits into the big picture prior to using the "Lesson Internalization Protocol for Teachers."

The "Lesson Internalization Protocol for Teachers" provides a step-by-step process for understanding each lesson before teaching, including what students will learn, how students are assessed, and how teachers can support all learners in meeting the challenges of the instructional materials.

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

The materials include resources for instructional leaders, which can be found under the "Program Level-Resources" tab. There are three resource protocols for instructional leaders (coaches) to support teachers with implementing the materials as designed: "Module and Topic Internalization Protocol for Coaches," "Lesson Internalization Protocol for Coaches," and "Student Work Analysis Protocol for Coaches."

The "Module and Topic Internalization Protocol for Coaches" outlines a four-step process designed for coaches to assist teachers in exploring or examining the consistency of concepts throughout the topics within a module. Revisiting this protocol at the start of each new topic within a module serves as a reminder for teachers about the relationships and coherence between the various topics in the module.

The "Lesson Internalization Protocol for Coaches" outlines a four-step method for coaches to assist teachers, either individually or in groups, in utilizing best practices for effective lesson delivery. Each step includes suggested timing, objectives, implementation strategies, and opportunities for deeper exploration.

The "Student Work Analysis Protocol for Coaches" presents a six-step plan for coaches to assist teachers in implementing focused strategies that enhance students' skill and knowledge development for future lessons.

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 "Teacher Edition" includes a Module Overview and the associated TEKS at the beginning of each module or topic. The Module Overview provides a sequential ordering of the associated topics along with the recommended number of "Learning Together" and "Learning Individually" sessions. At the end of each Module Overview, there is a recommended assessment summary that identifies the specific TEKS covered in each topic.

The "Teacher Edition" includes the rationale for the name of the Module and provides a detailed list of objectives for each topic. The Module Overview found in the "Teacher Edition" makes connections to prior learning to provide background content knowledge. The Topic Overview includes key terms and their definitions. A complete list of all terms is provided in the "Glossary."

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 "Course-Level Documents" include "Family Guides" in Spanish and English. The "Family Guide" includes a "Family Letter" that introduces the resources available to support their student. The resources include "Course Family Guide," "Topic Family Guides," "Topic Summaries," and "Math Glossary."

The "Family Guide" will walk the family "through the research-based instructional approach, how the course is structured, how the mathematics applies to the real world, using Talking Points from the Topic Family Guide, and using the TEKS mathematical process standards" in order to support the progress of their student child.

The "Family Guide" includes a detailed summary of what their student will learn in each topic or lesson within the modules (units), with connections to real-world concepts to enhance family discussions and support their student progress.

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).

In the "Teacher Edition," each lesson in each topic has a lesson overview. Each lesson overview includes a list of materials, the TEKS and ELPS covered in the lesson, as well as a set of essential ideas for the lesson. A detailed lesson plan follows with facilitation notes, differentiation strategies, and questions to support discourse.

Each lesson overview includes a list of materials needed, a lesson overview, standards, and a recommended time allotment to "Engage," "Develop," and "Demonstrate" the lesson objectives. The pacing recommendations include activities to promote student engagement and discussion. At the end of each activity, there is a designated "Stamp the Learning" prompt to inform teachers of the important takeaways for each activity and lesson.

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

The lesson overview found in the "Teacher Edition" includes a list of materials needed, both for the student and teacher, as well as the amount of time needed at the beginning of each lesson in an overview. There is also a specific lesson structure and pacing recommendation for each student activity to effectively deliver the lesson.

The "Teacher Edition" provides facilitation notes, common misconceptions, questions to support discourse, and differentiation strategies in the lesson overview, along with timing suggestions for each activity and ways to engage all students.

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

The "Teacher Edition" includes an outline and guidance for teachers to assign practice problems in each topic, as well as extensions for each lesson. There are multiple types of problems to assign to students, as well as the TEKS covered in each problem set. Guidance is given for selective use of the "problem sets to be used as a diagnostic tool throughout the course to identify each student's proficiency level with the TEKS to make data-driven instructional decisions."

The "Skills Practice Teacher Edition" includes guidance for teachers to use the extension sections of the "Skills Practice" "for students who have demonstrated proficiency in grade-level content and skills and are ready for a challenge" and the "Spaced Practice" sections for retrieving and reviewing skills," when students simply need extended practice.

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 an "Assessment Guide" document, which provides a bank of End of Topic Assessments along with guidance on how to integrate them into instruction effectively. These assessments come in diverse formats, featuring different types of tasks and questions. "End of Topic Assessments are provided to measure student performance on a clearly denoted set of standards."

The materials include formative and summative assessments that vary in type, such as discussion questions, independent practice, problem-based tasks, and performance-based assessments. The assessments include a variety of questions and task types throughout each lesson and at the end of each topic within a unit (module). For example, "there are three problem types students will encounter on an End of Topic Assessment: multiple-choice, multiselect, and open-response questions."

The materials include diagnostic assessment opportunities through the use of formative assessments throughout the unit's topics and lessons. For example, before starting a subsequent lesson, students are tasked with a "Talk the Talk" exercise. Teachers can use student responses to determine if and when to schedule individual learning days. Another example is a "Prepare" assignment at the end of a lesson, before the next lesson, to help educators monitor progress, identify learning gaps, and tailor instruction to individual or group needs. There is also a "Spaced Practice" section within the "Skills Practice" materials, which "allows students to recall and remember skills taught previously in the course and to build proficiency with course-level TEKS." These assessments are used to inform instruction and support early intervention.

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

The materials include an "Assessment Guide" that offers guidance on the definition and purpose of both formative and summative assessments. The "Assessment Guide" provides examples of how to utilize various formative assessments, including quick checks, warm-ups, talk-the-talk activities, and "Skills Practice" assessments. Additionally, it offers implementation suggestions for the summative End of Topic Assessments.

These assessments include a scoring guide that provides feedback on student performance, identifying the skills that students should practice based on their responses. The materials also include optional performance tasks, a scoring rubric, and specific implementation suggestions. The optional performance tasks can be used as either formative or summative assessments, which cover selected priority TEKS content from the course.

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

The materials include an "Assessment Guide" that provides teachers with consistent and accurate scoring for each End of Topic Assessment. The scoring guide "highlights the TEKS aligned to each question, identifies possible point values with a rubric for scoring, and recommendations for how to respond to students' performance," ensuring consistent administration across classes.

The "Assessment Guide" document also includes time and pacing, the point value of each item, and directions for scoring each item accurately.

The materials include a set of optional "Performance Tasks," which can be used as either formative or summative assessments after specific modules or topics. Along with each Performance Task, the materials include a "rubric to be used as a guide for consistent scoring and evaluating proficiency with the skills assessed in the task."

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

The materials include diagnostic assessments in the form of formative assessments, which are aligned with the TEKS and objectives of the course, unit (module), topic, or lesson. "Formative assessment as a diagnostic involves using the Prepare section of the Lesson Assignment and/or Spaced Review within the Skills Practice." Each lesson concludes with a "Prepare" task, which functions as a diagnostic assessment to facilitate spaced retrieval of previous learning and fluency relevant to the next lesson.

The materials include formative assessments throughout the lessons, such as worked examples with "Thumbs Up/Thumb Down" responses and "Who's Correct Problems" within each lesson of a unit, aligned

to the TEKS and course objectives. Another example of a formative assessment within the materials is a demonstration component within a lesson, such as the "Talk the Talk" activity, which allows teachers to identify common understandings and misunderstandings among the class and inform plans for future lessons. There are also "Questions to Support Discourse," which are used before or during instruction to gather detailed information about a student's current knowledge, skills, strengths, and learning needs.

The materials include a summative assessment scoring guide for each End of Topic assessment. "The scoring guide highlights the TEKS aligned to each question on the assessment." The summative "assessments are designed to cover the focus TEKS of the topic at the depth and rigor of the standard."

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

The materials include assessments in the "Teacher Edition," aligned with the TEKS, featuring varying levels of complexity, such as multiple-choice, graphing, and open-ended questions that require students to determine the solutions.

The materials also include optional "Performance Tasks" in the "Teacher Edition" tied to specific, course-aligned TEKS, which can serve as either formative or summative assessments. These tasks represent the highest order of complexity, encompassing all six levels of "Bloom's Taxonomy" (Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating) to complete the performance task. For example, "students will need to utilize the Problem-Solving Model Graphic Organizer when completing these real-world tasks." The model has five stages: "Notice and Wonder," "Organize and Mathematize," "Predict and Analyze," "Test and Interpret," and the final stage, "Report."

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 "Assessments Teacher Edition" includes an "Assessment Scoring Guide" that provides scoring recommendations for each topic in each module. For example, on Module 1, Topic 1 Assessment, scoring guidance provided for Question 6 states, "The student correctly provides a counterexample with an explanation (2 points). The student correctly provides a counterexample without an explanation (1 point). The student does not provide a correct counterexample or a correct explanation (0 points)."

In the "Teacher Edition," the lessons include guidance for giving formative assessments. The guidance provides facilitation notes, common misconceptions, look-for-understanding items, differentiation strategies, and questions to support discourse, offering teachers assistance as they progress through each lesson. For example, the guidance may highlight a specific question that presents an opportunity to assess students' understanding of the lesson's content. Based on student performance on this item, it is advised that teachers provide a specific "Skill Practice Set" for additional practice.

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

The "Assessments Teacher Edition" includes a "Response to Scoring" section for each topic assessment. For example, in Module 1, Topic 1, the "Response to Scoring" guides support students with Questions 3, 6, and 11. The guidance states, "To support students: Review counterexamples and use Skills Practice Set II.A for additional practice."

The "Teacher Edition" includes margin notes associated with tasks and activities designed to guide teachers on assessing student understanding. For example, in Module 1, Topic 2, Lesson 2, margin notes state, "Questions 1 and 2 present an opportunity to assess students' understanding of the essential content of the lesson. Use student responses to determine when to schedule Learning Individually days. To provide additional practice determining the slope of a line, assign Skills Practice Sets A and B for this lesson."

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 "Program-Level Resources" include a "Student Data Tracker." This tool allows educators "multiple ways...to assess students' understanding, identifying learning trends, and support differentiation." The tool can be used to track "Topic Self-Reflection Statements," monitor content and language standards for each topic, and track questions and standards from End of Topic Assessments.

The "Student Edition" includes a "Topic Self-Reflection" tool for students to track their progress and growth throughout the topic. This self-reflection tool allows students to rate their understanding of each objective at the beginning, middle, and end of a topic. They use a scale of 1–3, where 1 means the skill is new, 2 indicates developing proficiency, and 3 shows demonstrated proficiency.

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 "Teacher Edition" includes guidance for differentiated instruction, activities, and paired (scaffolded) lessons for students who have not yet achieved proficiency in grade-level content and skills. For example, "There are three different types of differentiation strategies offered to ensure access for all learners: Access for All, Just in Time Support, and Challenge Opportunity." For example, in Module 3, Topic 1, Lesson 1, the "Access for All" guidance strategy recommends "have students generalize what the ratios represent by writing image/pre-image. This will coincide with determining scale factors later in this lesson." The materials state, "these differentiation strategies support an opportunity to cultivate multiple ways of knowing and making meaning."

The "Teacher Edition" includes guidance for differentiated activities. For example, in Module 3, Topic 1, Lesson 2, Activity 3, the strategy offered is to "have students work with a partner or in a group to complete questions 1 through 4" and to "share responses as a class."

The "Teacher Edition" includes guidance for differentiated, paired (scaffolded) lessons, such as "Just-in-Time Support—strategies for supporting students who need extra help." For example, in Module 2, Topic 2, Lesson 2, Activity 5, the "Just-in-Time Support" strategy is to "Provide the statements for the proof and ask students to write the corresponding reason for each."

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 "Teacher Edition" includes pre-teaching or embedded supports for unfamiliar vocabulary and references in text. For example, at the beginning of each lesson is a list of key terms for that topic, which

helps to connect everyday and mathematical language. The materials state, "Cognates are provided for key terms when applicable."

The "Teacher Edition" includes embedded supports in the lessons, such as "student look-fors"—"these notes provide specific language, strategies, and/or errors to look and listen for as the teacher circulates and monitors students working in pairs or groups."

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 "Skills Practice Teacher Edition" includes guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skills. As stated in the "Skills Practice Teacher Edition," "Each section includes an extension activity for students who have demonstrated proficiency in grade-level content and skills and are ready for a challenge." For example, Module 1, Topic 2, Lesson 3, Extension is associated with TEKS G.9B (Apply the relationships in special right triangles 30°–60°–90° and 45°–45°–90° and the Pythagorean theorem, including Pythagorean triples, to solve problems).

Materials provide teacher guidance for extension activities in the "Course and Implementation Guide." Guidance in the differentiation subheading states, "to support gifted and talented students or any student who is showing proficiency in a standard and is ready for a challenge and/or extension to differentiate instruction by: using embedded Differentiation Strategies labeled as 'Challenge Opportunities'; utilizing the Extension section of the Skills Practice; scaffolding up the academic glossary by encouraging students to apply the terminology across disciplines and real-world applications; and using alternative grouping strategies."

The "Teacher Edition" includes guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skills. For example, to extend an activity for students who are ready to advance beyond the scope of the activity, additional challenges are provided, such as the "Challenge Opportunity" in Module 2, Topic 1, Lesson 3, Activity 2, which "have students construct other figures by expanding upon their construction of the hexagon."

The "Teacher Edition" includes enrichment activities with specific prompts for advanced questioning during discussions, such as asking students to justify their problem-solving strategies or compare different mathematical approaches, such as "Who's Correct activities, where students are not told who is correct." "Students have to think more deeply about what the strategies mean and whether each of the solutions makes sense." For example, in Module 2, Topic 2, Lesson 3, Activity 2, students are asked to choose between two different conjectures and then explain their reasoning for their choice.

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 "Teacher Edition" provides prompts and guidance to support teachers in modeling and explaining concepts, including facilitation notes, discussion questions, and identification of common misconceptions. For example, in Module 4, Topic 2, Lesson 1, Activity 1, the materials guide teachers in modeling the concept of "Rotating 2-D Shapes through Space." "In this activity, students cut three different two-dimensional shapes—a rectangle, a disc, and a triangle—from an index card, tape each to a pencil, and then rotate the pencil." Direct prompts are provided during the activity, such as, "When the rectangle was turned lengthwise and then taped, how would that affect the image of the solid associated with the rotation?" There is guidance for common misconceptions during the activity, such as, "students may use the terms geometric shape, geometric figure, and geometric solid interchangeably." It notes that "the description of a shape or figure may include one, two, or three dimensions, whereas the description of a solid must include three dimensions."

The "Teacher Edition" offers prompts and guidance to support teachers in modeling and explaining concepts, with side notes like "Stamp the Learning" for activities with Worked Examples. For instance, in Module 5, Topic 2, Lesson 2, Activity 2, the Worked Example is how to derive the formula for the conditional probability of two independent events. The "Stamp the Learning" note highlights this as an opportunity for explicit instruction, guiding teachers to "interact with this information as a class and encourage students to restate or explain the information in their own words." The activity includes direct prompts such as "When determining the conditional probability, what is the new sample space?" and "Why was it important to get total in each denominator?"

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

The "Teacher Edition" includes guidance and recommendations for effective lesson delivery and facilitation using a variety of instructional approaches. For example, in Module 1, Topic 2, Lesson 5, Activity 3, the facilitation notes suggest both direct instruction and group work. Teachers are directed to "Ask a student to read the information following question 3" and to "Analyze the Worked Example and complete questions 4 and 5 as a class," indicating a teacher-led approach to "Calculating Heights of

Triangles." The notes recommend "students work with a partner or in a small group to complete Questions 1 through 3."

The "Teacher Edition" provides guidance for each activity within a lesson for effective lesson delivery using a variety of instructional approaches. For example, Module 1, Topic 2, Lesson 5 includes six activities, each with a recommended time allocation and guidance on whether parts of the activity should be completed individually or with a partner. The materials also include prompts to help teachers monitor student understanding during each activity. Some activities use a direct instructional approach, such as the worked example in Module 1, Topic 2, Lesson 3.

The "Teacher Edition" includes recommendations to support effective lesson delivery, such as guidance for addressing common misconceptions. For example, Module 1, Topic 2, Lesson 3, the facilitation notes identify a common misconception: students may assume that "each square on the coordinate planes represents one square unit." The materials prompt teachers to address this by "remind[ing] students that this might not always be the case and they should check the scale of each graph before performing any calculations."

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 "Teacher Edition" provides guidance to support effective implementation. Each lesson includes facilitation notes that guide teachers through different types of practice and instructional delivery. A dedicated section in each lesson outlines how lesson components align with the instructional design framework: "Engage," "Develop," and "Demonstrate." For example, in Module 4, Topic 1, Lesson 4, the Develop phase is organized into three activities. The first activity is a 10-minute partner or group task focused on mathematical problem solving with a class discussion. The second activity spans 25 minutes and includes a Worked Example and additional problem solving. The final activity is a 15–20-minute small-group task. Each activity includes facilitation notes, guidance for addressing common misconceptions, and differentiation strategies to support effective implementation.

The "Teacher Edition" includes recommended instructional structures to support effective implementation. For example, in Module 2, Topic 2, Lesson 4, the facilitation notes recommend that teachers "have students work with a partner or in a group to complete Questions 2 and 3 and then share responses as a class." Similarly, in Module 1, Topic 3, Lesson 1, the "Develop" section is divided into two activities. The first activity is recommended to last 15 minutes and includes multiple instructional formats: students analyze a Worked Example with a partner or group, complete three follow-up questions independently, discuss Question 5 as a class, and return to partner or group work to complete Questions 6 through 8.

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 "Teacher Edition" includes guidance for accommodating students at various levels of language proficiency. "Emergent Bilingual (EB) Student Tips" are placed for teachers at point-of-use on the mini-lesson pages. For example, in Module 4, Topic 2, Lesson 2, Activity 1, "Point and Line Segment Cross-Sections," the EB Student Tip is for all proficiency levels and recommends to "create a word wall with pictures and names of the three-dimensional figures used in the lesson." The EB Student Tip in the next activity is for pre-production through Intermediate proficiency levels. The tip recommendation is to "provide students with the sentence frame—The cross-section formed is a _____." The tip also recommends to "have them write and say the sentence out loud to a partner to answer the relevant questions."

The "Teacher Edition" includes guidance for EB students, which is designed to engage students in using increasingly more academic language. The Topic Overview includes cognates for newly introduced key terms, along with instructional strategies for using cognates to support language development. For example, in Module 4, Topic 2, "Building Three-Dimensional Shapes," two of the key terms introduced are *oblique cylinder* with its Spanish cognate *cilindro oblicuo* and *sphere* with its Spanish cognate *esfera*. The materials recommend introducing a "Cognate Art Gallery," where students create visual representations of cognates using drawing, digital art, or other artistic media. Teachers are encouraged to display student work around the classroom to serve as ongoing visual reminders of the vocabulary and its linguistic connections.

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

The materials include a "Program Implementation Guide" that provides guidance to help teachers effectively use the materials in a state-approved bilingual/ESL program. The guide includes strategies for supporting EB students during each phase of a lesson. For example, in the "Engage" phase of a lesson, the "Program Implementation Guide" states, "the use of graphs or other visual representations are purposefully embedded to enhance understanding and to help students make connections." It also states, "students can create bilingual vocabulary references on these visuals to build conceptual understanding while developing English language proficiency."

The materials include a "Course and Implementation Guide" that provides guidance to help teachers effectively utilize the materials in a state-approved bilingual/ESL program. The "Course and Implementation Guide" notes that the ELPS are listed for each lesson and that teachers should consider these ELPS and decide on the instructional strategies they will use to meet them.

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

The "Teacher Edition" includes embedded guidance to support emergent bilingual students in developing academic vocabulary, building background knowledge, and making cross-linguistic connections through oral discourse. For example, in Module 4, Topic 1 Overview, the materials provide guidance on using key terms and their respective cognates introduced in the topic. The guidance states, "strategically grouping students with varying language proficiencies and factoring in group members' shared languages helps foster a collaborative learning environment." The guidance further emphasizes that "peer discourse enables students to explain concepts to each other in both languages and build off of each other's language, enhancing understanding and language skills simultaneously."

The "Teacher Edition" includes embedded guidance for teachers to support emergent bilingual students in developing academic vocabulary, building background knowledge, and making cross-linguistic connections through written discourse. For example, embedded in the lessons are "Modeling Moment" notes that provide instructional guidance on when and how to utilize the "Problem-Solving Model Graphic Organizer."

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. The materials include a "Skills Practice Student Edition" set of problems and "Assessments Student Edition" with varying levels of complexity, providing students with opportunities to practice the topic in multiple ways and demonstrate their depth of understanding. Each problem within a practice set or an assessment is aligned to the specific TEKS covered in the lesson and/or topic of a unit (module).

The "Skills Practice Student Edition" includes extension questions to provide opportunities for students to exhibit a deeper understanding of the TEKS at the end of each practice set, along with a set of "Spaced Practice" problems that spiral learning from previous modules and topics to maintain depth of understanding.

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

Questions and tasks progressively increase in rigor and complexity. For example, each lesson begins with questions that "Engage" students to activate and connect prior knowledge from previous coursework. Engage-type questions predominantly represent Level 1 (Remember) of Bloom's taxonomy. The lesson continues with a series of "Activities" that enhance rigor and develop the math concepts tied to the TEKS of the lessons within a topic to achieve grade-level proficiency. The questions in the activities typically increase in complexity and align with Bloom's taxonomy Levels 2–4 (Understand, Apply, and Analyze). Each subsequent activity advances in complexity. The lesson concludes with a "Talk the Talk" task, which correlates to Bloom's taxonomy Level 5 (Evaluate).

A core element of an activity in a lesson is a five-stage problem-solving model. Students begin by engaging with a real-world problem, using "Notice and Wonder" to gather information, identify patterns, and formulate mathematical questions. Next, they "Organize and Mathematize" the problem. The third

stage has them "Predict and Analyze," followed by "Test and Interpret." Finally, students "Report" their findings to a partner, small group, or the entire class.

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 "Teacher Edition" explicitly connects patterns, big ideas, and relationships between mathematical concepts across modules, topics, and lessons. At the module level, it explains the module's importance, its connection to prior learning, and its relevance to future concepts. For example, in Module 5, the "Teacher Edition" explains how independent and conditional probability progress from simple and compound probability to dependent events, the "Fundamental Counting Principle," and compound probability rules. It also notes how this learning builds upon grade 7 concepts and demonstrates how each subsequent topic builds upon the previous one.

The "Program Level Resources" include a "Secondary Mathematics Content Organization" document, which outlines the module format of all products from grade 6 through Algebra II and Geometry. The document explains how "In this course, students transition from the informal reasoning that encompassed much of their geometric studies throughout middle school to the more formal reasoning required in high school geometry." At the Geometry level, the document outlines each module with worked examples from each topic, showing the progression of learning from each topic to the next.

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 "Program Level Resources" include a "Content Organization" document" outlining the module structure from grade 6 through Algebra 2. It illustrates vertical alignment, showing how middle school math topics reappear in high school Geometry. For example, students progress from informal reasoning about shapes to formal reasoning about geometric properties. The document includes each module, accompanied by worked examples that demonstrate the progression of learning across topics.

The "Course Level Documents" includes a "Family Guide" document that breaks down each module and topic with answers to the questions "Where have we been? Where are we going? and Where are we now?" in ways that allow guardians to follow along with the lessons their child is learning. For example, each unit (module) includes sample questions, discussion points for students, and examples of how the TEKS can be observed in the real world.

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.

In the "Teacher Edition," each topic includes an overview of the lessons with explanations that connect what students should have learned, what they will learn, and how they are expected to demonstrate understanding. For example, in Module 1, Topic 1, Overview, students are introduced to the beginning of all geometric notations and terms, along with the entry point for what students learned in grade 8 and how they can apply those patterns of knowing to Geometric Reasoning.

The "Teacher Edition" includes a "Course and Implementation Guide" with a section called "Connecting Content and Practice." This section provides details on how to utilize the "Getting Started" section of each lesson to assess students' prior knowledge and real-world experiences. It offers specific guidance to pay attention to the strategies that students use, allowing instructors to observe their thought process and make connections that will benefit students as they progress through the lesson.

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 "Skills Practice Student Edition" includes spaced retrieval exercises that reinforce previously learned concepts. For example, in Module 3, Topic 1, Similarity, it includes questions on locating points on a number line, locating points on a coordinate grid, and the composition of transformations.

The materials include "Skills Practice Student Edition" practice sets that provide targeted skills practice, extension problems, spaced practice, and mixed-topic review. These sets reinforce recently learned content, as well as prior skills. For example, in Module 1, Topic 2, Skills Practice Set V, students find the area and perimeter of shapes on a coordinate grid after performing translations, applying both current and prior knowledge from earlier practice sets and grade levels.

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

The materials include mixed practice opportunities throughout the modules and lessons to deepen understanding of the topics. For example, in Module 1, Topic 2, students are asked to derive the formulas for slope, distance, and midpoint. They use patty paper to create geometric constructions and utilize the problem-solving graphic organizer to consider problems related to the coordinate system.

The materials include "Skills Practice Set[s]" of problems that correspond to specific modules and topics, along with guidance on which sets to use after designated lessons. These practice sets provide students with an opportunity to reinforce the skills and concepts they have recently learned, as well as those from previous practice sets and prior grade-level knowledge. For example, in Module 1, Topic 3, Skills Practice Set IV.E, students draw and describe the sequence of rigid motion transformations illustrated on a graph; these problems are directly related to Practice Set II.A.

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 "Teacher Edition" includes questions and tasks that require students to interpret, analyze, and evaluate models and representations of mathematical concepts and situations. For example, in Module 1, Topic 2, Lesson 1, Activity 1, "students analyze Worked Examples that provide steps to construct a segment bisector, a line perpendicular to a given line through a point on the given line, and through a point not on the given line." "They practice these constructions and then conjecture about the distance from any point on a perpendicular bisector of a line segment to the end points of the segment." The students are asked analytical questions such as, "Why do you have to open your compass larger than the radius?", "Why is using a compass a sufficient tool?", and "Why does the term perpendicular bisector identify the line you created?" during the activity.

The "Skills Practice Student Edition" provides students with opportunities to interpret, analyze, and evaluate models and representations of mathematical concepts and situations. For example, in Module 3, Topic 2, Lesson 3, Spaced Practice, Question 3, students are tasked with analyzing a figure of a bridge truss to calculate the lengths of two sections of the bridge. In Question 5, students are shown an image of two triangles and are tasked to evaluate whether the two triangles are similar, and if so, provide an explanation of their reasoning.

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

The "Teacher Edition" includes questions and tasks that prompt students to create models to represent mathematical situations. For example, in Module 1, Topic 1, Lesson 1, Activity 1.1, "students investigate the third undefined term, plane." "A plane is defined, and they explore how planes can intersect. The terms draw, sketch, and construct are explained, along with non-collinear points and skew lines." Analytical questions such as "What is another model you could use to represent a plane?", "Do planes have edges or boundaries?", and "Is it possible for a line to intersect a plane at two different points?" help

deepen understanding. Problem 3 of the activity tasks students to "sketch and describe all possible ways that a line and a plane can intersect."

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

The "Teacher Edition" includes questions and opportunities for students to apply conceptual understanding to new problem situations and contexts, such as "Thumbs Up/Thumbs Down" problems. "Thumbs Up problems allow students the opportunity to analyze viable methods and problem-solving strategies." A Thumbs Up problem "presents questions to help students think more in-depth about the various strategies and analyze correct responses." "Thumbs Down problems, showing incorrect responses, allow students to identify and explain errors and make corrections." This is done by showing students a worked example of the problem at hand and asking them to give a thumbs up or down whether it is solved correctly or incorrectly. This provides an opportunity for students to apply conceptual understanding to this new problem within the context of it being solved for them.

The "Student Edition" includes tasks for students to apply their conceptual understanding to new problem situations and contexts. One example of this is in Module 1, Topic 3, Lesson 2, "Talk the Talk: Off the Grid", students are tasked with describing a sequence of translations that maps triangle GHJ to triangle MNK off the coordinate plane, as outlined in Question 1. This task requires students to apply their conceptual understanding of translations, previously explored on the coordinate plane, to a new context where no grid is provided. By adapting their knowledge to describe the transformation using directional terms such as *left* and *down*, students demonstrate their ability to transfer geometric concepts to a novel situation, reinforcing their understanding of rigid motion transformations in a less structured environment.

The "Assessments Teacher Edition" includes "Performance Tasks" that give students opportunities to apply their understanding to new problems and situations. For example, in Performance Task 3, "Students use their knowledge of 30°–60°–90° triangles to calculate the vertical height of a drone and the height of a building."

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 "Skills Practice Student Edition" includes tasks to develop automaticity; for example, in Module 2, Topic 1, Set IV.B, the task begins by asking students to "use a conjecture" to find the missing third interior angle of a triangle. By encouraging students to use prior knowledge by making "a conjecture about the measures of the interior angles of a triangle," and then applying it to a new concept, "determine the unknown angle measure in each figure," students build automaticity.

The "Skills Practice Student Edition" includes tasks to build fluency; for example, in Module 2, Topic 1, Sets IV.A, materials provide repeated practice for students to "write the converse and determine if that statement is a biconditional statement" and "if false, provide a counterexample." Through repeated and deliberate practice of the process, students develop fluency in identifying converse statements, biconditional statements, and assessing the validity of a conditional statement.

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 "Teacher Edition" provides opportunities for students to apply efficient mathematical procedures within lessons and across units. For example, in Module 4, Topic 2, Lesson 3, teachers guide students through the process of developing volume formulas by leveraging their understanding of three-dimensional figures and how volume ratios change with varying base sizes. Students explore the efficiency of using a generalized formula that applies to multiple base shapes, rather than memorizing separate formulas for each shape.

The materials provide opportunities for students to apply flexible mathematical procedures within the lesson and/or throughout a unit. For example, in Module 5, Topic 1, Lesson 1, "Compound Sample Spaces," the materials state, "students learn strategies for determining the sample space of compound events." Tree diagrams are then introduced as a way to list outcomes in a situation." Students examine examples of tree diagrams and then, for different situations, practice the applications of creating their own flexible tree diagrams and organized lists of the corresponding sample space.

The "Teacher Edition" and "Student Edition" provide opportunities for students to apply accurate mathematical procedures within the lesson and/or throughout a unit. For example, in Module 1, Topic 4, Lesson 2, "Proving Triangle Congruence Theorems," "students investigate patterns and use constructions to make and validate conjectures about the criteria required for triangle congruence." They practice the application of these facts to accurately create and verify proofs of the SSS, SAS, and ASA congruence theorems using rigid motion transformations.

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 "Teacher Edition" provides students with opportunities to evaluate procedures, processes, and solutions for efficiency and flexibility within lessons and throughout a unit. At the start of the course, students are introduced to a five-step "Problem-Solving Model Graphic Organizer," which they use throughout the lessons and activities as appropriate. One of the steps, "Organize and Mathematize," prompts students to devise a plan by asking questions such as, "How can I efficiently solve this problem?" and "How can I organize, record, and communicate my mathematics?" Another step, "Test and Interpret," encourages flexibility by asking students to reflect on their work and consider alternative strategies, such as, "Can I solve the problem using a different strategy?"

The "Teacher Edition" provides students with opportunities to assess procedures, processes, and solutions for accuracy within lessons and across a unit. For example, in Module 4, Topic 1, Lesson 4, students evaluate these elements through worked examples and guided activities. In the first activity, students use the standard form of a circle equation. In the second, they analyze a Worked Example that models how to complete the square to find the center of the circle. Later, students are introduced to the general form of a circle's equation and prompted to consider how to modify their strategy to rewrite it in standard form. These multiple opportunities to explore different methods, analyze sample approaches, and discuss strategies support students in understanding the structure of circle equations, identifying key components, and accurately deriving the standard form.

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

The "Teacher Edition" contains embedded supports to guide teachers in helping students develop increasingly efficient approaches. For example, in Module 1, Topic 2, Lesson 2, Activity 2, "Parallel and Perpendicular Lines," students construct a line parallel to a given line in three increasingly efficient ways: first, by constructing two lines perpendicular to the same line; then, by constructing two congruent alternate interior angles; and lastly, by using translations. The embedded supports for teachers include recommendations for chunking the activity, look-fors, differentiation strategies, and common misconceptions.

The "Teacher Edition" includes embedded supports to help teachers guide students in developing increasingly efficient strategies. For example, in Module 5, Topic 2, Lesson 2, "Conditional Probability," the activities aim to build towards more effective approaches to understanding conditional probability. The lesson begins with students using a two-way table to list the possible sums when rolling a number cube twice, helping them determine compound probabilities. In the next activity, students continue using the two-way table to decide whether two events are dependent or independent. Then, they progress to deriving the general formula for the conditional probability of independent events efficiently. In the final activity, students are presented with "a probability situation involving choosing items from a set without replacement." "Students determine that the conditional probability formula works for actions that affect the outcomes of other actions" (dependent events)." The embedded supports for teachers include ideas for chunking the activity and offer guidance throughout the lessons on look-fors and how to approach specific parts of the activity.

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 "Program and Implementation Guide" explicitly states how the conceptual emphasis of the TEKS is addressed. It states, "To achieve a deep understanding, progression in instruction starts with building understanding with concrete objects or movements, then moves to representing concepts visually, and finally to abstraction by modeling with symbols." For example, in Module 1, Topic 3, "Sequences of Rigid Motions," which addresses TEKS G.3A and G.3B, students build understanding by using patty paper to translate a figure on and off a coordinate plane physically. Next, students represent the concept by using a directed line segment to transform a figure, and finally students model the transformation symbolically using coordinate notation to perform and describe sequences of rigid motions.

The "Course and Implementation Guide" explicitly states how the procedural emphasis of the TEKS is addressed. It states, "Once students have ample opportunities to build [conceptual] understanding, procedural problems and exercises are presented to increase computational fluency."

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 "Teacher Edition" provides questions and tasks that include the use of concrete models and manipulatives, as required by the TEKS. For example, in Module 3, Topic 1, Lesson 2, "Establishing Triangle Similarity Criteria," students use constructions created with a compass and straightedge to determine the fewest pairs of angles needed to prove the AA Similarity Theorem. Students also use protractors to measure the created angles to verify congruency. One of the questions included in the task is "Are the interior angles in each triangle also congruent?"

The "Teacher Edition" provides questions and tasks that include the use of pictorial representations (figures/drawings), as required by the TEKS. For example, in Module 1, Topic 3, Lesson 1, "Translations On and Off the Coordinate Plane," "students are presented with a context involving an image on a website that needs to be translated." Questions included in the task are "How did you measure the lengths of the line segments used in the translation?" and "Should the line segments be the same length?"

The "Teacher Edition" provides questions and tasks that include the use of abstract representations, as required by the TEKS. For example, in Module 4, Topic 2, Lesson 3, Activity 3, "Volumes of Spheres," students are given the abstract representation of the volume of a sphere and are tasked with determining the volumes of different spheres and hemispheres given the length of each radius. Students then compare the volumes of two spheres and two hemispheres when the length of the radius doubles. One of the questions included in the task is "Is the length of the diameter of a sphere equal to two times the length of the sphere's radius?"

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 "Teacher Edition" includes support for students in connecting concrete and representational models to abstract concepts. For example, in Module 1, Topic 2, Lesson 5, "Area and Perimeter on the Coordinate Plane," "Talk the Talk," students are asked to calculate the area of the shaded region within a regular polygon. Support includes chunking the activity and a review of the formula in finding the area of a regular polygon using apothem $A = (1/2)\, a\, P$.

The "Teacher Edition" includes support for students in creating concrete and representational models of abstract concepts. For example, in Module 4, Topic 2, Lesson 2 "Cross-Sections," students are shown three top views of different olive oil bottle openings—representing a square, circle, and isosceles triangle—alongside a variety of three-dimensional solids that could serve as potential bottle stoppers. Students are tasked with identifying which solids could fit into each bottle opening. The materials support this activity by recommending chunking the task, providing physical models of the stoppers so students can manipulate and rotate them, and offering patty paper so students can trace the faces of the solids and compare them to the bottle openings.

The "Teacher Edition" includes support for students in defining and explaining concrete and representational models of abstract concepts. For example, in Module 4, Topic 2, Lesson 3, Activity 4, "Volumes of Composite Figures," students analyze a worked example and determine the volume of composite figures. Support is given by chunking the activity and providing students with the "Problem-Solving Model Graphic Organizer." The Organizer "helps students organize and communicate their mathematics." In this activity, they use it collaboratively to help define and explain each of the composite figures presented.

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 "Student Edition" provides opportunities for students to develop their academic mathematical language using language development strategies. For example, a course-specific math glossary is available for students to utilize and reference during their learning. The glossary contains definitions, examples, and visuals of key terms. The strategy recommendation in the "Course and Implementation Guide" is to "encourage students to claim ownership of their learning by using the Math Glossary as a tool they interact with and reference consistently during instructional time and while working on assignments."

The "Teacher Edition" includes opportunities for students to develop their academic mathematical language using manipulatives. For example, in Module 1, Topic 2, Lesson 1, "Constructing a Coordinate Plane," students use manipulatives, such as a compass and straightedge, to construct a perpendicular bisector. Students practice these constructions and then conjecture about the distance from any point on the perpendicular bisector of a line segment to the endpoints of the segment.

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

The "Program Implementation Guide" includes embedded teacher guidance to scaffold and support students' development and use of academic vocabulary in context. It recommends scaffolding activities that promote cross-disciplinary and real-world applications of academic terminology through the use of the math glossary. For example, it suggests opening discourse with prompts such as, "How would this vocabulary integrate in the real world and in common language?" and "What careers would use this language regularly, and why might they use it regularly?" The guide also recommends encouraging students to make real-world connections to the vocabulary, as it will help them apply the information they are learning to other disciplines.

The "Teacher Edition" includes embedded educator guidance to scaffold and support students' development and use of academic vocabulary in context. For example, in Module 1, Topic 2, Lesson 1, Activity 3, "Rigid Motions," the guidance recommends having a student read the introduction and definitions aloud, followed by partner or group work to complete Question 1. Guidance is then provided

to prompt students to share responses as a class. Additionally, the guidance encourages having students restate or explain the concept in their own words.

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 "Teacher Edition" includes embedded teacher guidance to support the application of appropriate mathematical language, including vocabulary, syntax, and discourse, thereby facilitating mathematical conversations. For example, in Module 1, Topic 1, Lesson 2, "Formal Reasoning in Euclidean Geometry," a differentiation strategy suggests that teachers ask pairs of students to create their own mathematical or non-mathematical conditional statements. Students then exchange statements and determine their validity. This strategy is designed to clarify key vocabulary, symbols, and language structures, supporting students' ability to engage in precise mathematical discourse.

The "Teacher Edition" includes embedded guidance to help teachers encourage the use of proper mathematical language during conversations and to create opportunities for students to hear, refine, and use math language with peers, helping them build their math language toolkit over time. For example, in Module 1, Topic 2, Lesson 4, Activity 1, "Triple Play," the guidance recommends reading the information and definition as a class, having students work with a partner or in a group to complete Questions 2 and 3, and sharing responses as a class. Additional guidance notes that "the definition provides an opportunity for explicit instruction" and encourages teachers to have students restate or explain the information in their own words.

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 "Course and Implementation Guide" explains how the TEKS process standards are integrated appropriately into the materials. For example, it states, "the instructional materials embody the TEKS mathematical process standards as they encourage experimentation, creativity, and various solution strategies. These mathematical processes empower students to persevere when presented with complex real-world problems."

The TEKS Mathematical Process Standards are properly incorporated into the materials. The scope and sequence document lists all seven of the TEKS Mathematical Process Standards—G.1A, G.1B, G.1C, G.1D, G.1E, G.1F, and G.1G—as being included in the materials.

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

The "Teacher Edition" includes a description of how the TEKS mathematical process standards are incorporated throughout the course. The "Problem-Solving Model" utilized throughout the course is outlined in the "Course and Implementation Guide" under the subheading "Facilitating Student Learning." The "Course and Implementation Guide" states, "Productive mathematical thinkers are problem solvers. These instructional materials include a problem-solving model to help students develop proficiency with the TEKS Mathematical Process Standards and to make sense of the problems they must solve." The guidance recommends that as students engage with the model, teachers prompt them to use the provided questions to guide their thinking and spark peer discussion. When appropriate, teachers are advised to provide students with the "Problem-Solving Model Graphic Organizer" to support their problem-solving process.

The "Teacher Edition" includes a Pacing Guide that includes a description of the TEKS mathematical process standards, G.1A through G.1G, are embedded throughout the course. The overview states, "Each topic is written with the goal of creating mathematical thinkers who are active participants in class discourse, so elements of the TEKS mathematical process standards should be evident in all lessons." It further explains that students are expected to "make sense of problems and work toward solutions,

reason using concrete and abstract ideas, and communicate their thinking while providing a critical ear to the thinking of others."

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

The "Teacher Edition" includes the TEKS process standards and a description of how they are incorporated and connected throughout the unit (module). For example, in Module 1, Topic 1 Overview, "Geometry Reasoning," four of the seven process standards are included. In this topic, students select tools as they differentiate between the terms *draw*, *sketch*, and *construct* (G.1C). They learn geometric symbols to communicate their reasoning throughout the course (G.1D). Students also use deductive reasoning to analyze mathematical relationships and make conjectures (G.1F). Finally, they use precise mathematical language as they build definitions from the undefined terms *point*, *line*, and *plane* (G.1G).

The "Teacher Edition" includes a Pacing Guide that lists the TEKS mathematical process standards, G.1A through G.1G, and describes how they are integrated throughout each unit. The unit (module) overview notes that "each topic is written with the goal of creating mathematical thinkers who are active participants in class discourse, so elements of the TEKS mathematical process standard should be evident in all lessons." It further explains that students are expected to make sense of problems and work toward solutions, reason using both concrete and abstract ideas, and communicate their thinking while critically evaluating the reasoning of others.

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

The "Geometry Course and Implementation Guide" includes a section called TEKS Mathematical Process Standards Notes." This section states, "Each note references a particular TEKS mathematical process standard. The first instance of a TEKS mathematical process standard is highlighted in a lesson and encourages you to introduce the standard to your students. After the first time a process standard is highlighted, additional notes help you assess whether students are demonstrating proficiency with the process standards."

The "Teacher Edition" includes an overview of the TEKS process standards incorporated into each lesson. For example, in Module 1, Topic 2, Lesson 1, Overview lists three of the seven TEKS mathematical process standards, G.1C, G.1D, and G.1G, along with a description of the student expectation to meet the specific standards incorporated in the lesson.

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 "Student Edition" provides opportunities for students to think mathematically through embedded "Ask Yourself" prompts included throughout the lessons. For example, in Module 1, Topic 2, Lesson 5, Question 3, the "Ask Yourself" text bubble states, "How can you use a transformation of the composite figure on the coordinate plane as part of your strategy?"

The materials provide opportunities for students to persevere through solving problems. The "Course and Implementation Guide" recommends using the "Self-Monitoring Strategies" callouts in the "Teacher Edition," which are strategically placed throughout the text to help teachers recognize students demonstrating perseverance to encourage others to apply similar strategies. These call outs prompt educators to look for evidence of self-motivation, self-discipline, and self-awareness as students work through challenging problems.

The "Student Edition" provides opportunities for students to make sense of mathematics. For example, "Who's Correct" problem types are embedded throughout the lessons. In these tasks, students are not told which character is correct; instead, they must analyze the reasoning presented, evaluate the validity of each strategy, and determine which solution makes mathematical sense.

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 "Teacher Edition" supports students in understanding that there can be multiple ways to represent and solve problems and complete tasks. For example, in Module 1, Topic 2, Lesson 5, "Getting Started, Perimeter and Area of Figures on the Coordinate Plane," students calculate the perimeter and area of a rectangle and analyze how doubling one dimension impacts both dimensions. They then investigate how translating the rectangle can possibly make the calculations of the area and perimeter more efficient. Teacher guidance provided for the activity includes having students work with a partner or in a group and through probing questions, such as "Describe the translations to relocate the rectangle" and "What are

the dimensions of the enlarged rectangle?" Some questions help them see structure, such as, "Why do you think you get the same area regardless of what dimension you double?"

The "Teacher Edition" supports students in explaining that there can be multiple ways to represent and solve problems. For example, in Module 3, Topic 1, Lesson 6, Activity 2, "Partitioning Directed Line Segments," students analyze two possible strategies to locate fractional distances along a directed line segment. Teacher guidance includes support for grouping students, addressing common misconceptions, and facilitating mathematics discourse through probing questions, such as, "Are some fractions easier to work with than others? If so, why?"

The materials support students in justifying that there can be multiple ways to represent and solve problems and complete tasks. For example, the "Course and Implementation Guide" provides guidance for discussing problem-solving with students. It suggests reminding students that, "It's not just about answer getting. The process is important. Making mistakes is a critical part of learning, so take risks. There is often more than one way to solve a problem. Activities may include real-world problems, sorting activities, Worked Examples, or analyzing sample student work. Be prepared to share your solutions and methods with your classmates."

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.

Materials are designed to require students to make sense of mathematics through multiple opportunities for students to engage in math, write about math, and discuss math with peers and teachers. For example, in Module 3, Topic 2, Lesson 2, Activity 2.3, the "Teacher Edition" guides teachers to provide students with the "Problem-Solving Model Graphic Organizer" and have them work with a partner to complete it for Question 3. The structured organizer supports students in analyzing their mathematical thinking and engaging in peer discussion. As a final step, students write a report about their problem-solving process. In this case, students use trigonometry to calculate the angle formed by the movement of a movable bridge.

Materials are designed to require students to make sense of mathematics through multiple opportunities to engage in math, write about math, and discuss math with peers and teachers. For example, in Module 2, Topic 1, Lesson 4, students write and discuss conjectures about triangles, explain the methods they use to solve problems, and justify their reasoning with geometric evidence. The "Teacher Edition" includes facilitation notes with questions that promote mathematical discourse, such as "How did you determine the validity of the conjecture and its converse?" and "What did you use to determine the sum of the measures of the interior angles of a triangle?" These prompts encourage students to think critically about the reasoning and processes used in forming and evaluating geometric conjectures.

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 "Teacher Edition" supports teachers in guiding students to share and reflect on their problem-solving approaches, including explanations. For example, in the "Facilitation Notes" for Module 2, Topic 2, Lesson 6, the "Talk the Talk" task at the end of the lesson, prompts teachers to "Have students work with a partner or in a group to complete Questions 1 and 2. Share responses as a class." In this activity, students use angle and line relationships along with the theorems related to the angles of circles to determine what information they know about given diagrams. Teacher guidance includes various types of questioning—such as probing, reflective, and justifying questions—to support mathematical discourse. For instance, the prompt, "Do you think Angel's claim holds true for the exterior angles of any quadrilateral or only for quadrilaterals inscribed in circles? Why?" encourages students to restate ideas in their own words and justify their reasoning.

The "Teacher Edition" supports teachers in guiding students to share and reflect on their problem-solving approaches, including arguments and justifications. For example, in Module 2, Topic 2, Lesson 4, Activity 4, "Solving Problems with Theorems," the margin notes suggest making this activity a "Modeling Moment" by grouping students to complete the activity and providing them with the "Problem-Solving Model Graphic Organizer." The organizer works as a conduit for them to "make sense of the problems they must solve." Further guidance recommends that "as students collaborate, suggest they use the provided questions to spark discussion."

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

The "Teacher Edition" offers guidance to support teachers in providing explanatory feedback based on student responses and anticipated misconceptions. For example, in Module 5, Topic 1, Lesson 4, Activity 3, students analyze a menu and determine the probability of selecting various dinner combinations. The teacher guidance anticipates a common misconception—that students may treat the selection of meal courses as dependent events, assuming that the choice of entrée affects other selections. To address this, the guidance recommends clarifying that, for the purposes of this activity, the events should be considered independent.

The "Teacher Edition" offers prompts to support teachers in providing explanatory feedback based on student responses and anticipated misconceptions. For example, in Module 5, Topic 1, Lesson 2, Activity 3 "Dependent Events with *And*," students analyze a situation involving random selection, first with replacement and then without replacement. The materials identify an anticipated misconception that "students may think that the sample space is comprised of only three items instead of accounting for two red socks, one blue sock, and three green socks, for a total of six items in the sample space." To address this, the material provides targeted prompts such as, "How many total socks are in the drawer?" and "What is the total number of choices for the first sock?".