IMRA Review Cycle 2024 Report

Publisher Name	Program Name
Accelerate Learning	*STEMscopes Texas Math*
Subject	**Grade Level**
Mathematics	7

Texas Essential Knowledge and Skills (TEKS) Coverage: **100%**

English Language Proficiency Standards (ELPS) Coverage: **100%**

Quality Review Overall Score: **227 / 227**

IMRA Reviewers

Flags for Suitability Noncompliance 0

Indicator	Count of Flags
1. Prohibition on Common Core	0
2. Alignment with Public Education's Constitutional Goal	0
3. Parental Rights and Responsibilities	0
4. Prohibition on Forced Political Activity	0
5. Protecting Children's Innocence	0
6. Promoting Sexual Risk Avoidance	0
7. Compliance with the Children's Internet Protection Act (CIPA)	0

Flags for Suitability Compliance 5

Indicator	Count of Flags
Alignment with Public Education's Constitutional Goal, 2.1.1	5
Promoting Sexual Risk Avoidance, 6.2	0

Alleged Factual Errors 0

Public Feedback

Flags for Suitability Noncompliance 0

Rubric Indicator	Count of Flags
1. Prohibition on Common Core:	0
2. Alignment with Public Education's Constitutional Goal	0
3. Parental Rights and Responsibilities	0
4. Prohibition on Forced Political Activity	0
5. Protecting Children's Innocence	0
6. Promoting Sexual Risk Avoidance	0
7. Compliance with the Children's Internet Protection Act (CIPA)	0

Alleged Factual Errors 0

Public Comments 0

Quality Review Summary

Rubric Section	Quality Rating
1. Intentional Instructional Design	53 / 53
2. Progress Monitoring	28 / 28
3. Supports for All Learners	32 / 32
4. Depth and Coherence of Concepts	23 / 23
5. Balance of Conceptual and Procedural Understanding	66 / 66
6. Productive Struggle	25 / 25

Strengths

- 1.1 Course-Level Design: Materials include a scope and sequence outlining the TEKS, ELPS, concepts, and knowledge taught in the course, with suggested pacing guides for various instructional calendars, explanations for the rationale of unit order and concept connections, guidance for unit and lesson internalization, and resources to support administrators and instructional coaches in implementing the materials as designed.
- 1.2 Unit-Level Design: Materials include comprehensive unit overviews that provide background content knowledge and academic vocabulary necessary for effective teaching, and contain supports for families in both Spanish and English with suggestions for supporting their student's progress.
- 1.3 Lesson-Level Design: Materials include comprehensive, structured lesson plans with daily objectives, questions, tasks, materials, and instructional assessments required to meet the content and language standards. They also provide a lesson overview outlining the suggested timing for each component, a list of necessary teacher and student materials, and guidance on the effective use of lesson materials for extended practice, such as homework, extension, and enrichment.
- 2.1 Instructional Assessments: Materials include a variety of instructional assessments at the unit and lesson levels, including diagnostic, formative, and summative assessments with varied tasks and questions, along with definitions and purposes, teacher guidance for consistent administration, alignment to TEKS and objectives, and standards-aligned items at different levels of complexity.
- 2.2 Data Analysis and Progress Monitoring: Materials include instructional assessments and scoring information that provide guidance for interpreting and responding to student performance, offer guidance on using tasks and activities to address student performance trends, and include tools for students to track their own progress and growth.
- 3.1 Differentiation and Scaffolds: Materials include teacher guidance for differentiated

instruction, activities, and scaffolded lessons for students who have not yet reached proficiency, pre-teaching or embedded supports for unfamiliar vocabulary and references in text, and guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skills.

- 3.2 Instructional Methods: Materials include prompts and guidance to support teachers in modeling, explaining, and directly and explicitly communicating concepts to be learned. They provide teacher guidance and recommendations for effective lesson delivery using various instructional approaches, and support multiple types of practice with guidance on recommended structures, such as whole group, small group, and individual settings, to ensure effective implementation.
- 3.3 Support for Emergent Bilingual Students: Materials provide guidance for teachers in bilingual/ESL programs, support academic vocabulary and comprehension, and include resources for metalinguistic transfer in dual language immersion programs.
- 4.1 Depth of Key Concepts: Materials provide practice opportunities and instructional assessments that require students to demonstrate depth of understanding aligned to the TEKS, with questions and tasks that progressively increase in rigor and complexity, leading to grade-level proficiency in mathematics standards.
- 4.2 Coherence of Key Concepts: Materials demonstrate coherence across courses and grade bands through a logically sequenced scope and sequence, explicitly connecting patterns, big ideas, and relationships between mathematical concepts, linking content and language across grade levels, and connecting students' prior knowledge to new mathematical knowledge and skills.
- 4.3 Spaced and Interleaved Practice: Materials provide spaced retrieval and interleaved practice opportunities with previously learned skills and concepts across lessons and units.
- 5.1 Development of Conceptual Understanding: Materials include questions and tasks that require students to interpret, analyze, and evaluate various models for mathematical concepts, create models to represent mathematical situations, and apply conceptual understanding to new problem situations and contexts.
- 5.2 Development of Fluency: Materials provide tasks designed to build student automaticity and fluency for grade-level tasks, offer opportunities to practice efficient and accurate mathematical procedures, evaluate procedures for efficiency and accuracy, and include embedded supports for teachers to guide students toward more efficient approaches.
- 5.3 Balance of Conceptual Understanding and Procedural Fluency: Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed, include questions and tasks that use concrete models, pictorial representations, and abstract representations, and provide supports for students in connecting and explaining these models to abstract concepts.

- 5.4 Development of Academic Mathematical Language: Materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, and language strategies, with embedded teacher guidance on scaffolding vocabulary, syntax, and discourse, and supporting mathematical conversations to refine and use math language.
- 5.5 Process Standards Connections: Materials integrate process standards appropriately, providing descriptions of how they are incorporated and connected throughout the course, within each unit, and in each lesson.
- 6.1 Student Self-Efficacy: Materials provide opportunities for students to think mathematically, persevere through problem-solving, and make sense of mathematics, while supporting them in understanding multiple ways to solve problems and requiring them to engage with math through doing, writing, and discussion.
- 6.2 Facilitating Productive Struggle: Materials support teachers in guiding students to share and reflect on their problem-solving approaches, offering prompts and guidance for providing explanatory feedback based on student responses and anticipated misconceptions.

Challenges

- No challenges in this material

Summary

Accelerate Learning's *STEMscopes Texas Math* is a mathematics 6–8 program. The materials promote conceptual understanding of mathematics through hands-on exploration, inquiry, and analysis using the research-based 5E + IA model (Engage, Explain, Elaborate, Evaluate, Intervention, and Acceleration). It offers vertically aligned instructional materials that cover all TEKS and ELPS. The materials support students by building concrete understanding before transitioning to representational models and abstract representations. The program provides detailed guidance for teachers, administrators, and families. Additionally, the program includes resources in both English and Spanish that benefit all learners, including students with disabilities, emergent bilingual, and gifted and talented students.

Campus and district instructional leaders should consider the following:

- The materials include teacher support for teaching students to understand and communicate mathematics through discourse and writing with arguments, justification, and explanations. These supports are woven throughout the materials, including questioning strategies at different Depth of Knowledge levels, interleaved practice, and spaced retrieval opportunities.
- The program is a comprehensive set of instructional materials that includes planning resources, teacher guidance, assessments, and an extensive selection of instructional materials for remediation, on-level instruction, and extension. Teachers may benefit from training on the program components, including navigating the online platform.

Intentional Instructional Design

1.1	Course-Level Design	15/15
1.1a	Materials include a scope and sequence outlining the TEKS, ELPS, concepts, and knowledge taught in the course.	**5/5**
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).	**2/2**
1.1c	Materials include an explanation for the rationale of unit order as well as how concepts to be learned connect throughout the course.	**2/2**
1.1d	Materials include guidance, protocols, and/or templates for unit and lesson internalization.	**2/2**
1.1e	Materials include resources and guidance to support administrators and instructional coaches with implementing the materials as designed.	**4/4**

The materials include a scope and sequence outlining the TEKS, ELPS, concepts, and knowledge taught in the course. 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). Materials include an explanation for the rationale of unit order as well as how concepts to be learned connect throughout the course. Materials include guidance, protocols, and/or templates for unit and lesson internalization. Materials include resources and guidance to support administrators and instructional coaches with implementing the materials as designed.

Evidence includes, but is not limited to:

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

- Grade 7, Teacher ToolboxTeacher Toolbox, Essentials, Curriculum Design provides a scope and sequence that outlines each of the units by name, TEKS, ELPS, and Mathematical Process Standards (MPS). The total instructional days allotted for each unit are included in the outline as well.
- Each unit and lesson in grade 7 materials includes an overview that outlines key concepts, a suggested calendar that identifies a scope and sequence, and content support that outlines the TEKS. One example found in "Grade 7, Rational Numbers, Explore 1," outlines process standards and ELPS by saying "The following English Language Proficiency Standards are supported: 1.BEF, 2.DEI, 3.BCDEFHJ, 5.BDEFG."

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

- The Teacher Toolbox, Lesson Planning Resources includes planning guides to assist teachers in planning out the daily and weekly agendas based on a five-day week for 50-minute and block, 90-minute classes. Each document includes templates for both whole-group and small-group plans.
- Grade 7 materials include Suggested Scope Calendars that offer pacing for whole-group and small-group implementation for each set of Explore activities within the unit.
- In grade 7, Teacher Toolbox, Essentials, Curriculum Design, Implementation Guide, a suggested pacing calendar for 180 days is provided. The guide states that "suggested activities...can be added or removed" to provide for other calendars and gives suggestions for 165 days and more than 180 days.

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

- Materials include a grade 7 *Course Rationale Document* that provides a written explanation of unit order, how recurring topics appear throughout the units, and a description of the vertical alignment of standards throughout the course. For example, the Rational Numbers unit is explained to "expand on students' understanding of numbers by delving into the sets and subsets of rational numbers, including their operations...Students gain fluency in adding, subtracting, multiplying, and dividing rational numbers, a critical skill supporting algebraic reasoning and problem-solving across various contexts."
- Materials include a grade 7 *Course Rationale Document* that provides a chart to show how units are connected to the standards in four categories: 1) Number and Operations, 2) Proportionality, 3) Expressions, Equations, and Relationships, and 4) Measurement and Data.

Materials include guidance, protocols, and/or templates for unit and lesson internalization.

- The suggested scope calendar for each unit lesson under the planning section includes a lesson internalization component. This component includes guidance on reading through lessons, connecting lessons to tasks, and assessing student progress. Within the *Teacher Guide* is a template for lesson internalization that provides the teacher with a place to annotate their notes.
- The main page of each grade 7 scope lists TEKS, key concepts, and fundamental questions in each scope calendar. On the right side of the page, under Essentials, a Suggested Scope Calendar provides a protocol for lesson internalization for teachers to follow as they unpack the content and lesson.
- The *Teacher Guide* provides step-by-step facilitation notes, procedures, and materials needed for teachers for each day's lesson in the scope. The guide begins with a summary of the scope, the vertical alignment of topics, and a list of standards. It also provides space for teachers to

plan out their steps as they make adjustments. For example, grade 7, Rational Numbers, Overview, Teacher Guide has boxed and lined sections for each Explore activity titled "Notes" for teaching planning.

Materials include resources and guidance to support administrators and instructional coaches with implementing the materials as designed.

- The *Implementation Guide* includes support for administrators and instructional coaches with implementation from the vantage points of various scopes. It also includes foundational teacher actions that administrators and/or coaches look for during observations and a chart to use as an observation tool.
- The *Implementation Guide*, found in the Curriculum Design bookmark in the Teacher Toolbox, has a section specifically for Administrator and Instructional Coach Support. This section includes scope and sequence, suggested scope calendar, various calendar options (suggestions), planning guides and how to find them, foundational teacher actions to encourage and reinforce, observation look-fors, student tracking tips, information on assessment types offered, and quantile measures.

Intentional Instructional Design

1.2	Unit-Level Design	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.	**2/2**
1.2b	Materials contain supports for families in both Spanish and English for each unit with suggestions on supporting the progress of their student.	**2/2**

The materials include comprehensive unit overviews that provide the background content knowledge and academic vocabulary necessary to effectively teach the concepts in the unit. Materials contain supports for families in both Spanish and English for each unit with suggestions on supporting the progress of their student.

Evidence includes, but is not limited to:

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

- In grade 7, each unit has a *Teacher Guide* that shows a summary of the unit and a summary of the vertical alignment that highlights background knowledge and future grade expectations. For example, in grade 7 Rational Numbers Overview, the paragraph begins with "In grade 6, students are introduced to the classifications of integers and rational numbers" to show how students connect to previous knowledge. The overview then states how this connects to future grade levels.
- The grade 7 materials provide supplementary activity handouts in each unit that include a list of options for teachers to meet the diverse needs of their students with academic vocabulary. Academic vocabularies are in the Teacher Toolbox, Essentials, Picture Vocabulary and the Rational Numbers, Explain, Interactive Vocabulary.
- Grade 7 materials include a "Terms to Know" section within the Content Support. This section provides the academic vocabulary necessary to teach the concepts within the unit.

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

- Grade 7 materials allow families and caregivers to be involved in student learning by providing a *Take-Home Letter* in both English and Spanish stating key points of the lesson, necessary vocabulary, and optional home activities. For example, in grade 7 Rational Numbers, the *Take-Home Letter* includes several examples of problems with solutions and explanations, academic vocabulary, and ways to connect learning to everyday life. The last section of the letter suggests "Look at the receipt for your most recent trip to the grocery store. What rational numbers do you see?"

- In the grade 7 Teacher Toolbox, there is evidence of support and guidance for families through videos shared with parents on the *Quantile Parent Guide*.
- Grade 7 materials provide content support to families through various content support videos in each unit. For example, the grade 7 Rational Numbers, Home, Content Support shows a graphic organizer of rational number classifications, tips on applying operations with rational numbers, and a "look ahead" to show what new concepts appear in the unit.

Intentional Instructional Design

1.3	Lesson-Level Design	34/34
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.	**30/30**
1.3b	Materials include a lesson overview outlining the suggested timing for each lesson component.	**1/1**
1.3c	Materials include a lesson overview listing the teacher and student materials necessary to effectively deliver the lesson.	**2/2**
1.3d	Materials include guidance on the effective use of lesson materials for extended practice (e.g., homework, extension, enrichment).	**1/1**

The 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. Materials include a lesson overview outlining the suggested timing for each lesson component. Materials include a lesson overview listing the teacher and student materials necessary to effectively deliver the lesson. Materials include guidance on the effective use of lesson materials for extended practice (e.g., homework, extension, enrichment).

Evidence includes, but is not limited to:

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.

- Grade 7 materials provide a *Teacher Guide* for each unit that contains objectives, tasks, materials lists, preparation needed, and procedure and facilitation points that walk teachers through each lesson. The unit is divided into stages: Engage, Explore, Explain, Elaborate, Evaluate, Intervention, and Acceleration. The *Teacher Guide* is detailed and structured to provide the entire unit in one document.
- Grade 7, Rational Numbers, Suggested Scope Calendar materials provide detailed lesson plans for each unit that include daily task objectives, questions, tasks, and instructional assignments to support the lesson's content and language standard.
- Each grade 7 unit provides standards-based assessments and skills quizzes that the teacher assigns to students in digital or print form. For example, in grade 7, Rational Numbers, Evaluate includes options describing the objective, materials, preparation needed, and tips for implementation.

Materials include a lesson overview outlining the suggested timing for each lesson component.

- Each unit in grade 7 provides a suggested calendar by lesson. For example, the grade 7 Rational Numbers Suggested Scope Calendar indicates that on day 1, spend no more than ten minutes on the warm-up, no more than thirty minutes on the focused lesson, and options for spiraled review for forty minutes or interactive vocabulary for fifteen minutes as independent practice options.
- Grade 7 materials have a Suggested Scope Calendar for each unit that provides daily posted lesson objectives, warm-up options (5–10 minutes), focus lesson options (20–30 minutes), closure, and formative assessment options.
- Grade 7 materials assist teachers in planning out daily and weekly agendas by providing four different weekly schedule documents based on a five-day week for two different schedule types (50-minute and block, 90-minute) in the Teacher Toolbox.

Materials include a lesson overview listing the teacher and student materials necessary to effectively deliver the lesson.

- In grade 7 materials, a Lesson Overview provides materials and preparation sections that detail how to set up and use the materials and the procedure recommendations for every lesson. One example is in grade 7, Rational Numbers, Accessing Prior Knowledge.
- In grade 7 materials, the *Teacher Guide* for each lesson and activity includes a list of needed student and teacher materials. One example is in grade 7, Rational Numbers, Scope Overview.

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

- Grade 7 materials in each unit include the "Explain" section with interactive components for students to work independently. One example is grade 7, Rational Numbers, Explain, Show What You Know, where different activities allow the student to work with a Google form, interact with the student dashboard, or work on a printed PDF provided by the teacher. Teachers assign these tasks for individual practice or homework.
- Grade 7 materials in each unit include the "Elaborate" section that includes options for an extension, such as spiraled review, interactive practice, PhET, data science, and fluency builder. These are assigned digitally or printed as handouts for use as extensions and enrichments.

Progress Monitoring

2.1	Instructional Assessments	24/24
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.	**12/12**
2.1b	Materials include the definition and intended purpose for the types of instructional assessments included.	**2/2**
2.1c	Materials include teacher guidance to ensure consistent and accurate administration of instructional assessments.	**2/2**
2.1d	Diagnostic, formative, and summative assessments are aligned to the TEKS and objectives of the course, unit, or lesson.	**6/6**
2.1e	Instructional assessments include standards-aligned items at varying levels of complexity.	**2/2**

The 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. Materials include the definition and intended purpose for the types of instructional assessments included. Materials include teacher guidance to ensure consistent administration of instructional assessments. Materials include teacher guidance to ensure accurate administration of instructional assessments. Diagnostic, formative, and summative assessments are aligned to the TEKS and objectives of the course, unit, or lesson. Instructional assessments include standards-aligned items at varying levels of complexity.

Evidence includes, but is not limited to:

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.

- Grade 7 materials provide a Package Assessment in the "Assessment" tab, including pre-tests, mid-tests, and post-tests. Each of these has a description of the intended use. For example, the Mid-Assessment has a description that reads, "The Mid-Assessment will assess a mixture of grade-level and precious-grade-level standards." The description informs the teacher that the test should be used as a formative assessment.
- Each unit in the grade 7 materials includes skill quizzes, standard-based assessments, technology-enhanced questions, checkups, exit tickets, projects, and performance tasks to use for formative assessment. For example, grade 7, Proportional Relationships, Evaluate includes a Mathematical Modeling Task and grade 7, *Proportional* Relationships, Acceleration includes a Would You Rather activity. In the same unit under "Acceleration," a choice board project is included. Each of these provides a different type of task for students to show understanding.
- In grade 7 materials, the "Assessment" tab allows teachers to create diagnostic, formative, and summative assessments with a variety of tasks, including plotting on a number line, fill-in-

the-blank, multiple-choice, and short, constructed response questions. These assessments are administered digitally or in print, in English or Spanish.

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

- In each unit of grade 7, the Suggested Scope Calendar defines diagnostic, formative, and summative assessments. Each assessment listed has a label D (diagnostic), F (formative), or S (summative) and has a rationale for when and why to use the assessment. For example, Proportional Relationships, Suggested Scope Calendar lists Standards-Based Assessment (S) as an assessment option and follows it with the description, "A multiple-choice standards-based assessment in which students demonstrate mastery of the content."
- The "Assessment" tab of the grade 7 materials provides pre-, mid-, and post-assessments with a definition to inform teachers of when and how to use each. For example, the materials state, under post-assessment, "The Post-Assessment will evaluate all grade-level standards and can be used as a predictor of student performance on state tests." This description defines summative assessment and clarifies how it evaluates learning.
- Each of the grade 7 skill quizzes is defined as a formative assessment meant to determine student fluency with key concepts. For example, in grade 7, Proportional Relationships, the Skills Quiz is defined as "a short, standards-based formative assessment."

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

- Each unit's assessments under Evaluate provide procedure and facilitation points, tips and tricks, and answer keys for accurate administration. For example, in grade 7, Proportional Relationships, Evaluate, and Standards-Based Assessment under Procedure and Facilitation Points, the teacher's directions are "1. Distribute the Student Handout to each student. 2. Prompt students to show what they know in completing the assessment. 3. Allow students to reflect on their performances using the Heat Map."
- Each unit's assessments and quizzes under *Evaluate* provide preparation instructions, procedure and facilitation points, tips and tricks, and answer keys for accurate administration. For example, the grade 7 Rational Numbers, Evaluate, Skills Quiz directs, "Once data has been collected, refer to the scaffolded instruction guide to differentiate instruction for each student."

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

- Each unit in grade 7 contains an Observation Checklist that outlines the aligned TEKS for formative monitoring. A side-by-side table is provided in the observation checklist for both the student and teacher. It matches each skill or concept with its correlating standard and its

subsequent description of how it is being covered. For example, Grade 7, Rational Numbers, Evaluate, Observation Checklist shows the first standard of 7.2A describing skill or key concept, "Extend previous knowledge of sets and subsets using a visual representation to describe relationships between sets of rational numbers." Then under "How was the skill or concept observed?" the list includes physical modeling, pictorial modeling, problem solving, discussion, and written explanation.

- Each unit in grade 7 includes a heat map that outlines the aligned TEKS for the skills quizzes (formative) and standards-based assessments (summative). The heat map contains a side-by-side table that matches each question with its corresponding standard for students and teachers to track progress. For example, grade 7 Proportional Relationships, Evaluate, Heat Map gives a color-coded key that differentiates miscalculation, explanation, or misconception errors. The chart then provides the standards associated with the unit content and the questions that align with that standard.
- Grade 7 materials provide Benchmark Assessments in which the question details provide the TEKS correlation for each assessment item, the answer key, and the topic and unit with which the question aligns in the materials. For example, when *Details* is selected on Question 1 of the *STEMscopes Texas Math Grade 7 Pre-Assessment*, the *Standards* section reads, "*Texas Math > Texas Essential Knowledge and Skills for Mathematics > 6.2A, STEMscopes Texas Math Review > Texas Essential Knowledge and Skills for Mathematics > 6.2(A)*."

Instructional assessments include standards-aligned items at varying levels of complexity.

- In each unit of grade 7 materials, the *Evaluate* section provides answer keys, listing the complexity of each question in the form of depth of knowledge (DOK). For example, the answer key for grade 7, Proportional Relationships, Evaluate, Standards-Based Assessment, indicates that question five is DOK 2. These labels show varying levels of complexity.
- The grade 7 Benchmark Assessments provide questions of varying complexity, including dropdown, fill-in, drag-and-drop, and graphing. For example, STEMscopes Texas Math Grade 7 Post-Assessment contains two Griddable, 11 fill-in-the-blank, 16 multiple-choice, and one multiple-answer questions.

Progress Monitoring

2.2	Data Analysis and Progress Monitoring	4/4
2.2a	Instructional assessments and scoring information provide guidance for interpreting and responding to student performance.	**2/2**
2.2b	Materials provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments.	**1/1**
2.2c	Materials include tools for students to track their own progress and growth.	**1/1**

The instructional assessments and scoring information provide guidance for interpreting and responding to student performance. Materials provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments. Materials include tools for students to track their own progress and growth.

Evidence includes, but is not limited to:

Instructional assessments and scoring information provide guidance for interpreting and responding to student performance.

- Every unit in grade 7 includes a *Scaffolded Instruction Guide*, which guides teachers to interpret and respond to specific standards in grade 7. The guide also provides details for interpretation and response to overall percentile ranges from a diagnostic assessment. For example, Rational Numbers, Home, Scaffolded Instruction Guide shows a table of percentile range categories corresponding to previous grade level remediation, grade level with supports, grade level, and extending grade level.
- Each grade 7 unit provides a *Teacher Guide* that shows evidence of teacher planning for response to student performance. For example, Rational Numbers, Scope Overview, Teacher Guide provide an assessment planner that includes questions teachers ask to ensure mastery of the concept after intervention. The instructions are "Use this template to decide how to assess your students for concept mastery. Depending on the assessment format, teachers can identify prompts and intended responses to measure student mastery of the expectation."
- In the "Evaluate" section of each grade 7 unit, a heat map is provided to guide teachers in responding to student performance after assessments. Based on the focused standard, the heat maps offer feedback on each student's specific areas of strength and weakness through color coding, which visually indicates issues of miscalculation, lack of explanation, and misconception.

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

- Each unit in the grade 7 materials contains a Skill Review, and Practice in the "Intervention" section. This section outlines specific actions for teachers and students to use quick checks, reviews, small groups, and independent practice for students based on scores for each standard. For example, Rational Numbers, Intervention, Skill Review, and Practice shows procedure and facilitation points such as "3. Use the skill rubric at the end of the Quick Check to identify which students require additional help on the skills." and "5. Each student should complete the Review as an intervention or an individual activity. Optionally, pull students into a small group to work on review skills."
- Every grade 7 unit includes a *Scaffolded Instruction Guide*, which guides teachers in interpreting and responding to specific standards in grade 7. The guide also provides details for interpretation and response to overall percentile ranges from a diagnostic assessment. For example, Rational Numbers, Home, Scaffolded Instruction Guide shows a table broken down into four categories with descriptions and links on providing an appropriate response. The "Previous Grade Level Remediation" category begins with skills review and practice, fluency builder, and skills quiz with lesson links.
- The Teacher Toolbox, Lesson Planning, Differentiation Pathways Guide suggests ways for teachers to pull students into small groups and use a separate resource or a strategy specific to any lesson or skill being taught. For example, the grade 7 Differentiation Pathways guide provides a table with elements for assessing mastering levels. Then, it shows resources for teachers to use for students who meet grade level, approach grade level, or perform below grade level.

Materials include tools for students to track their own progress and growth.

- Each unit in grade 7 provides an *Observation Checklist* for students to track their progress by standard. The checklist is a student-friendly document with each standard including an "I can" statement, a "How could you show you know this?" checklist, and a "How would you rate yourself?" scale with icons. For example, Rational Numbers, Evaluate, Observation Checklist begins with the 7.2A statement, "I can extend previous knowledge of sets and subsets using a visual representation to describe relationships between sets of rational numbers."
- Every grade 7 unit provides a heat map in the "Evaluate" section that helps students align each skill assessment question to the corresponding state standard and reflect on their confidence, challenges, errors, and future avoidance of errors. For example, in Rational Numbers, the Evaluate Heat Map begins with the directions, "Refer to your answers on the Skills Quiz. Color the correct question boxes green, and color incorrect question boxes according to the following key."
- The Teacher Toolbox for grade 7 includes a Goal-Setting Form and a lesson plan for teachers to help students set and track goals. The handout consists of "I can" statements that students fill out and then checkmark when the goal is met. Prompts are provided for setting small benchmark goals as well as long-term goals.

Supports for All Learners

3.1	Differentiation and Scaffolds	8/8
3.1a	Materials include teacher guidance for differentiated instruction, activities, and/or paired (scaffolded) lessons for students who have not yet reached proficiency on grade-level content and skills.	**3/3**
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)	**2/2**
3.1c	Materials include teacher guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skills.	**3/3**

The materials include teacher guidance for differentiated instruction, activities, and/or paired (scaffolded) lessons for students who have not yet reached proficiency on grade-level content and skills. Materials include pre-teaching or embedded supports for unfamiliar vocabulary and references in text (e.g., figurative language, idioms, academic language). Materials include teacher guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skills.

Evidence includes, but is not limited to:

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

- Each unit in grade 7 has a Scaffolded Instruction Guide that aids teachers in providing interventions and differentiated instruction for students who have not met proficiency. For example, in "Rational Numbers" the guide is broken into four categories: Previous Grade Level Remediation, Grade Level with Supports, Grade Level, and Extending Grade Level. Each category has a pair or group of scaffolded lessons and activities with links provided.
- The Teacher Toolbox contains an "Intervention" tab that provides teacher guidance for using a variety of differentiated instruction modalities such as visuals and manipulatives to support those who have yet to reach proficiency in grade-level skills. As a table, this guide includes strategies and activities to be utilized when students need additional support, e.g., utilizing manipulatives, labeling objects, physical demonstrations, peer talk, and play-based learning. For example, next to Modifying Instructions, the guide states "Include concrete examples in each set of instructions on the assessment to assist students' understanding of expectations."
- The Teacher Toolbox includes a Differentiation Pathway Guide in the lesson planning resources. The guide provides scaffolded lessons within the content to address different proficiency levels of Masters, Meets, and Approaching. For example, under Approaching, the guide states "If students have some knowledge of the content, then they can gain understanding of the important concepts using the following elements."

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

- Each unit in the grade 7 materials includes Language Connections, Interactive Vocabulary, and Picture Vocabulary lessons in the Explain section that provides pre-teaching vocabulary using student-friendly definitions. For example, in Rational Numbers, under Explain, Picture Vocabulary, there are procedure and facilitation points and tips and tricks. There is also a visual slideshow for teachers to present to the class, guiding questions such as "How can you connect this word to your work?" and visual vocabulary cards for students to add to their notebooks.
- Each unit in the grade 7 materials includes a "Content Unwrapped" in the "Home" section that details pre-teaching guidance and embedded supports for defining academic language that may be unfamiliar to students. This section identifies key verbs and nouns that students need to know. For example, Rational Numbers, Content Unwrapped begins the teacher direction with "What should students be doing? add: to combine two or more numbers; to calculate the total sum; apply: to use."
- In each "Explore" section of each unit in grade 7, there are Instructional Supports and Language Supports embedded to assist teachers in teaching vocabulary. For example, the materials in Rational Numbers, Explore 1 states, "Clarify vocabulary in the football scenarios that would indicate a positive number or a negative number."

Materials include teacher guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skills.

- Each unit provides a Scaffolded Instruction Guide that gives suggestions and links to activities based on assessment data that is broken into four categories including Grade Level and Extending Grade Level. For example, the materials in Rational Numbers, Scaffolded Instruction Guide provide teacher guidance for differentiated instruction for students who have demonstrated proficiency in grade-level content for standard 7.3b specifically with the activities Picture Vocabulary, Interactive Vocabulary, Interactive Notebook, and Fluency Builder, Representation of Rational Numbers.
- Each unit in grade 7 culminates with an enrichment activity for students who have shown proficiency on grade-level skills. These include a project-based learning activity, a research project, and a creative project that synthesizes content and student learning. For example, the "Acceleration" tab in Grade 7, Angle Relationships has "Would You Rather" and "Choice Board" activities that align with the concepts of the unit. The Would You Rather activity states that it is "an enriching activity for students to use mathematical reasoning and creativity to justify an answer."
- Throughout the unit activities, like the ones in the "Explore" section, there are multiple instructional supports that include teacher directions for extension when students have shown proficiency with grade-level concepts. These teacher notes include differentiated extension questions and/or activities. For example, in Circles, Explore 1, notes include that "as an extension, challenge students to find other circles in the classroom or at home to measure."

Supports for All Learners

3.2	Instructional Methods	13/13
3.2a	Materials include prompts and guidance to support the teacher in modeling, explaining, and communicating the concept(s) to be learned explicitly (directly).	**6/6**
3.2b	Materials include teacher guidance and recommendations for effective lesson delivery and facilitation using a variety of instructional approaches.	**4/4**
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.	**3/3**

The materials include prompts and guidance to support the teacher in modeling, explaining, and communicating the concept(s) to be learned explicitly (directly). Materials include teacher guidance and recommendations for effective lesson delivery and facilitation using a variety of instructional approaches. 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.

Evidence includes, but is not limited to:

Materials include prompts and guidance to support the teacher in modeling, explaining, and communicating the concept(s) to be learned explicitly (directly).

- Each unit in the materials includes a Teacher Guide in the "Home" section under Scope Overview that gives step-by-step prompts and guidance that support teachers when giving directions, introducing topics, and addressing misconceptions. The guide includes facilitation tips for all levels, pre- and post-activity questions for exploration, detailed materials and lesson preparation guidelines, and tips for accessing interactive sessions for student use found in the Elaborate section. For example, in the Engage portion of the Proportional Relationships, Scope Overview, Teacher Guide, a facilitation tip is given: "Ask for volunteers to spot check for students being able to justify their responses...it is a good opportunity to determine student strengths and gaps for this scope." Scenario statements and answers are also provided here.
- Under Content Support in the "Home" section in each unit, the materials provide prompts and guidance for each isolated concept. For example, Proportional Relationships, Content Support provides guidance on using a bar model to convert measurement units and rates with students. The work and written answers for the example problems are in red font.
- Each activity within the materials includes prompts and guided instructions labeled as Procedure and Facilitation Points to support the teacher in communicating, explaining, and modeling the concepts directly and explicitly. These also include Depth-of-Knowledge (DOK) questions and answers that teachers should expect, and question stems to communicate and model the concepts. For example, the Rational Numbers, Explore 1 procedure and facilitation points state "Monitor students, and check for understanding as needed using the following guiding questions: DOK-2 How can you determine the set that each group of numbers belongs to?" Sample answers are also provided.

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

- The materials provide recommendations for effective delivery using a variety of instructional approaches through the 5E Model which is broken down and explained in the Teacher Toolbox. Each lesson is separated by Engage, Explore, Explain, Elaborate, and Evaluate and each one has different instructional approaches. For example, in Rational Numbers, Engage, students go through a hands-on activity that includes a connection to background knowledge with an oral facilitation activity, and the Rational Numbers, Explore, students are provided with group activities, writing activities, and oral facilitation activities.
- Materials include teacher guidance and recommendations for effective lesson delivery and facilitating tasks that allow active participation, exploration, and discovery through Preparation and Procedure and Facilitation Points. For example, in Circles, Explore 3, the preparation section states, "have student groups work to decompose a circle by cutting out the sectors of the circle and create a parallelogram to demonstrate how the base and height of the parallelogram relate to the parts of the circle." With this guidance, the teacher is also provided with depth-of-knowledge level questions to facilitate the discussion.
- Materials include teacher guidance that employs a variety of instructional approaches for effective lesson delivery, including Math Talks, Turn-and-Talk, Whole-Group Discussions, and Mathematical Modeling Tasks. For example, in Teacher Toolbox, Structured Conversations various instructional approaches to encourage intentional discourse include routine use of activities such as Four Corners, Gallery Walk, Pair Square Share, Walk Talk Decide, and Around The Room.

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 Suggested Scope Calendar and Scope Overview, Teacher Guide in the "Home" section of each unit in the materials show headings and labels that aid teachers in distinguishing between different types of practice (guided, independent, and collaborative) within the lesson structure. For example, Predictions and Probability, Suggested Scope Calendar details lesson objectives, warm-up activities, a focus lesson, independent work, and student homework options. The Rational Numbers, Scope Overview, Teacher Guide shows directions for a partner and whole group activity in the Accessing Prior Knowledge section and directions for independent practice in the Skill Review and Practice section.
- The Scaffolded Instruction Guide in each unit provides a variety of options and resources for students to practice and apply the concepts learned including whole group, small group, individual, partner, and project-based activities. For example, Circles, Scaffolded Instruction Guide lists activities for all students in Hooks, Explores, Show What You Know, and Skills Quiz. Then the guide shows activities for smaller differentiated groups of students to work in small groups, partners, or individually based on the need for previous grade level remediation, grade

level instruction with supports, grade level instruction without supports, and extending grade level activities.

- Each lesson within the unit shows a variety of teacher guidance for effective implementation with multiple types of practice. For example, in Proportional Relationships, Engage, teacher guidance is to "Ask students to justify their responses with an elbow partner. Choose volunteers to explain their reasoning to the whole group." In the same unit "Explore 1," teacher guidance is to "plan to divide the class into groups of 3 or 4 students...give a set of job listing cards to each group" for collaboration. In the Intervention section of the unit, the teacher guidance indicates using the skill review and practice while also ensuring students independently complete the Quick Check.

Supports for All Learners

3.3	Supports for Emergent Bilingual Students	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.	2/2
3.3b	Materials include implementation guidance to support teachers in effectively using the materials in state-approved bilingual/ESL programs.	1/1
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.	8/8
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.	Not scored

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

Evidence includes, but is not limited to:

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 provide linguistic accommodations for Emergent Bilingual students in developing academic vocabulary by providing sentence stems that support both oral and written discourse and are tailored to different proficiency levels (beginner, intermediate, and advanced) by domain. For example, in the Multilingual Learners section of the Teacher Toolbox, teachers are told "Language acquisition...process is continuous and open-ended and it differs across language domains (listening, speaking, reading, and writing) depending on factors such as context or situation." Additionally, the Proficiency Levels by Domain section provides an overview of how students are applying language as well as methods and tools designed to engage students in using increasingly more academic language.
- The Explore activities in every unit include Language Supports with guidance on supporting students at different levels of listening, speaking, reading, and writing proficiency. For example, "Area, Explore 1" shows the following English Language Proficiency Standards are

supported: 1.BCEH, 2.CDGHI, 3.ABCDEFHG. Guidance includes "providing word walls and anchor charts depicting the terms rectangle, parallelogram, semicircle, etc....can be used by students to self-monitor as they are responding to questions or talking with partners."

- Grade 7 materials emphasize ways in which the teacher builds academic vocabulary as the unit progresses, such as anchor charts, cognate charts, image collages with labels, and vocabulary walls. In Area, Explain, there is a language connections section that supports linguistic and cultural background knowledge for connections to vocabulary at various proficiency levels. Under reading and speaking for intermediate students, the materials provide ways for the teacher to echo-read a story and chunk the story into sentences while students point to the words as they read. The guidance reads "Discuss the scenario with students and make hand gestures where applicable as you ask questions."

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

- The Teacher Toolbox has a Multilingual Learners section that provides a list of the resources given throughout the materials as well as descriptions to guide teachers as they internalize lessons with the language tools. The resources listed are Proficiency Levels by Domain, Working on Words, Sentence Stems/Frames, Integrated Accessibility Features, Take-Home Letters, Tiered Supports, Language Connection, Virtual Manipulatives, Visual Glossary/Picture Vocabulary, Virtual Learning Videos, Skills Quiz, My Math Thoughts/Math Story, Problem-Based Task/Mathematical Modeling Task, Daily Numeracy, Data Science, Structured Conversation Routines, and Vocabulary Strategies.
- The "Explain" section in every unit provides Language Connections that support students in bilingual and ESL programs. For example, in Proportional Relationships, Explain, Language Connections, teacher directions begin with "1. Distribute a student handout at the appropriate proficiency levels for each student. 2. Use the prompts for listening, speaking, reading, and writing portions. Use gestures, pointing at objects, and visuals as appropriate. See prompts as appropriate." There are further prompts, sentence stems, and directions for modeling broken down into the different proficiency levels. Student handouts with teacher answer keys are provided in both English and Spanish at each proficiency level.

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 Multilingual Learners section of the Teacher Toolbox provides Linguistic Diversity that facilitates oral discourse, builds background knowledge, builds cross-linguistic connections, and shows embedded guidance on how to use each of the strategies for emergent bilingual students. For example, under "Working on Words," the description reads "This open-ended activity allows students to take agency and accountability for their growing vocabulary. This activity also encourages making relevant, personal connections to new terms in different ways, such as identifying cognates." Furthermore, under "Integrated Accessibility Features,"

the description reads "Across the curriculum, we have embedded tools that allow students to listen to text being read aloud, find the definition of words in the moment, make notes, and highlight words and phrases."

- The "Explain" section of each unit contains a page of resources for Language Connections for increasing language comprehension with emergent bilingual students. Handouts in English and Spanish are provided along with answer keys for these levels of language acquisition: beginner, intermediate, and advanced. The page includes a description, materials, preparation instructions, procedure and facilitation points, and detailed dialogue and questions for each leveled handout.
- Grade 7 materials provide various strategies for building vocabulary, comprehension, background knowledge, language proficiency, and spirals previously learned vocabulary and concepts to promote retention through oral and written discourse. For example, the Launch into Grade 7, Explain provides several vocabulary games such as "What's on my Back," "Graffiti Art," "Bingo," and "Drawing Game" that promote both oral and written discourse for emergent bilingual students.

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

- In the Teacher Toolbox, the Linguistic Diversity section provides opportunities to address metalinguistic transfer from English to Spanish. Resources include "Sentence Stems" in English and Spanish, "Working on Words" in English and Spanish, and "Proficiency Levels by Domain." This section also lists how the materials integrate research-based strategies and tools into the materials to support linguistically diverse learners. The list, which includes Language Connections, Virtual Manipulatives, Visual Glossary/Picture Vocabulary, and Virtual Learning Videos, also has a description of how each of the strategies support the student. For example, the description next to "My Math Thoughts/Math Story" reads "Students can apply reading strategies to aid with comprehension and practice not just math vocabulary, but situation vocabulary as well."
- The Explain section of each unit contains Language Connections with Spanish language connections for beginner, intermediate, and advanced proficiency levels. The Language Connection states that "students can use their linguistic and cultural background knowledge to support connections to new skills, vocabulary and concepts." The side-by-side language connection gives opportunities to address metalinguistic transfer from English to Spanish. For example, in Circles, Explain, Language Connections, the materials show how to express the circumference of a circle using steps in Spanish, a formula, and images for transfer to English.
- The Implementation Guide in the Teacher Toolbox and the materials in each unit provide visuals and suggested linguistic scaffolds for teachers to meet the needs of multilingual learners at all proficiency levels. Resources, including Take-Home Letter, Anchor Charts, Math Stories, and Student Journal, are translated into Spanish and transadapted as appropriate. This allows dual language educators the tools for side-by-side comparison, cross-linguistic bridging, and linguistic analysis opportunities between English and Spanish.

Depth and Coherence of Key Concepts

4.1	Depth of Key Concepts	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.	**1/1**
4.1b	Questions and tasks progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics standards.	**2/2**

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. Questions and tasks progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics standards.

Evidence includes, but is not limited to:

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 opportunities for students to identify concepts and solve real-world, relevant tasks and problem-solving situations that align with the TEKS, including concrete representations. For example, in Volume, Elaborate, the Fluency Builder activity requires students to "fix" a mistake by analyzing a problem. Students determine if the solution is correct or if incorrect, fix the error. This error analysis supports the demonstration of depth of understanding and practice.
- The materials include a variety of assessments that require students to demonstrate learning at a depth of understanding aligned with the TEKS. For example, the Proportional Relationships, Explain, Show What You Know 2 assessment asks students to convert measurements using modeling in an open-ended space. The answers given show depth of understanding aligned to TEKS 7.4E.

Questions and tasks progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics standards.

- From Engage to Acceleration, materials demonstrate questions progressively increasing in rigor and complexity which leads to grade-level proficiency throughout the lesson. For example, in Similar Figures, increasing levels of Depth-of-Knowledge (DOK) questions are provided for teachers throughout these activities and lessons.
- Tasks in materials increase in rigor and complexity as the learning scaffolds concrete understanding into representational and abstract thinking. For example, in Proportional Relationships, students begin the unit by recalling what they know about constant rates of change from grade 6. With progressive increases in both rigor and complexity, Explore has students work through consecutive tasks including finding unit rates, calculating

measurement conversions, and both finding and using the constant of proportionality. In the Explain, students demonstrate learning by finding unit rates and using the constant of proportionality. In the Elaborate and Evaluate, students practice applying the concepts alongside spiraled review before demonstrating learning in the Standards-Based Assessment and Skills Quiz which both include varying response type questions.

- In every unit, the materials provide DOK level 1–4 questions to increase rigor and complexity. Skills Quizzes and Math Chats include facilitation directions with level 1 recall questions focusing on facts, details, definitions, and procedures with one correct answer. Standards-Based Assessments, Show What You Know activities, and Interactive Practice include level 2 skill/concept questions where students apply skills and concepts by answering *how* and *why* questions with one correct answer. Explore activities and Anchor Charts provide level 3 strategic-thinking questions which require reasoning, planning, and defending conclusion and allow for multiple answers and approaches. Choice Boards and Mathematical Modeling Tasks contain level 4 extended-thinking questions that emphasize real-world applications and new situations with complex reasoning, planning, and multistep processes required. These questions are embedded throughout the lesson and found in the Teacher Guide in the "Home" section under Scope Overview in each unit. For example, "Rational Numbers, Acceleration, Would You Rather" contains a level 4 prompt for students to "use mathematical reasoning and creativity to justify" their answer to the provided Would You Rather question.

Depth and Coherence of Key Concepts

4.2	Coherence of Key Concepts	12/12
4.2a	Materials demonstrate coherence across courses/grade bands through a logically sequenced and connected scope and sequence.	**2/2**
4.2b	Materials demonstrate coherence across units by explicitly connecting patterns, big ideas, and relationships between mathematical concepts.	**3/3**
4.2c	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.	**3/3**
4.2d	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.	**4/4**

The materials demonstrate coherence across courses/grade bands through a logically sequenced and connected scope and sequence. Materials demonstrate coherence across units by explicitly connecting patterns, big ideas, and relationships between mathematical concepts. 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. 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.

Evidence includes, but is not limited to:

Materials demonstrate coherence across courses/grade bands through a logically sequenced and connected scope and sequence.

- The Course Rationale in the Teacher Toolbox shows coherence of knowledge and skills across the course through a logically sequenced Scope Order. For example, the grade 7 Course Rationale states that the order of the units is designed to "build on previous concepts, ensuring a coherent progression that enhances students' understanding and application of mathematical principles." The rationale then provides a table to both demonstrate the order of concepts and TEKS learned within the materials and that connecting TEKS are revisited and spiraled into new content.
- A Content Unwrapped in the Home section in each unit provides a vertical alignment chart that connects the progression of knowledge and skills across grade bands 5–8. For example, "Volume, Content Unwrapped" states that students model relationships between the formula of area in grade 6; model formulas of volume with prisms and pyramids and solve problems involving volume and area in grade 7; and then build skills related to volume in grade 8.

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

- The order of units in grade 7 materials demonstrates a coherent progression of patterns in mathematics. For example, the grade 7 Course Rationale in the Teacher Toolbox explains how the Ratios, Rates, and Percents unit applies mathematical reasoning to enhance the understanding of patterns of proportions from the previous unit, Proportional Relationships.
- The materials provide an explicit connection of big ideas in mathematics through the Content Support in the Home section in each unit. This section offers background knowledge of the big ideas, addresses misconceptions, and highlights important academic vocabulary that will help make proper connections. For example, "Non-proportional Relationships, Content Support" shows how students make connections between independent and dependent variables and the coordinate plane and then extend the idea in future units to linear relationships.
- The Content Unwrapped in the "Home" section of each unit provides evidence of coherence across units by connecting relationships between mathematical concepts. For example, Ratios, Rates, and Percents, Content Unwrapped states that students will connect the relationships between financial literacy and the concept of interest to solve problems involving simple and compound interest.

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 provide connections to previous grade levels in the Content Support in the "Home" section in each unit. For example, Proportional Relationships, Content Support states that in grade 5, students generate a numerical pattern when given a rule and in grade 6 students understand the concept of ratios to form relationships between quantities. In the current grade level, students use pictorial, tabular, verbal, numeric, graphical, and algebraic representations to calculate unit rates and constants of proportionality.
- The materials include conceptual, pictorial, and abstract representations supporting the content and language applicable to previous grade levels. For example, Volume, Explain, Picture Vocabulary shows images that scaffold from previous grade levels and include current grade-level vocabulary. The formula picture card contains information learned as early as grade 5 (formula V=lwh) and continues with current grade-level learning (formula V=Bh).
- The Content Support in the Home section of each unit connects content and language in the current grade level to future grade levels. For example, Similar Figures, Content Support provides vocabulary and TEKS from grade 4 through grade 8, allowing teachers to aid students in creating learning connections with academic language.

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 Content Unwrapped in the Home section of each unit shows a coherent progression of concepts and procedures from prior grade levels to new mathematical knowledge and skills. For example, Angle Relationships, Content Unwrapped contains background knowledge showing the connection of geometric terms from previous grade levels and now relationships between sides of triangles. The background knowledge also connects procedures for solving equations in grade 6 to now solving for sides or angles of triangles.
- Materials have a coherent progression of concepts and procedures from the current grade level, from discovering and finding to solving. For example, the Volume unit contains a set of 3 lessons that connect the concept of parts of volume formulas and procedures for solving volume problems. In Accessing Prior Knowledge in the "Engage" section, students identify misconceptions with respect to height, area, and volume; in Explore 1, students make discoveries and determine the volume of cylinders; and in Explore 2, students use understanding and procedures from Explore 1 to determine the formula and solutions to problems involving the volume of a cone.

Depth and Coherence of Key Concepts

4.3	Spaced and Interleaved Practice	8/8
4.3a	Materials provide spaced retrieval opportunities with previously learned skills and concepts across lessons and units.	**4/4**
4.3b	Materials provide interleaved practice opportunities with previously learned skills and concepts across lessons and units.	**4/4**

The materials provide spaced retrieval opportunities with previously learned skills and concepts across lessons and units. Materials provide interleaved practice opportunities with previously learned skills and concepts across lessons and units.

Evidence includes, but is not limited to:

Materials provide spaced retrieval opportunities with previously learned skills and concepts across lessons and units.

- The materials use a 5E + AI model (Engage, Explore, Explain, Elaborate, Evaluate, Intervention, Acceleration) which intentionally spaces retrieval opportunities for skills and concepts throughout the lessons of a unit. Planned intervention allows for flexible retrieval opportunities during or between lessons. For example, the "Similar Figures, Intervention" tab provides a Quick Check, Review, and Checkup that include similar figures and scale drawings that reinforce skills and concepts learned throughout the unit.
- The materials provide spaced retrieval for previously learned skills across units through Mathematical Fluency sessions throughout the course. For example, in Mathematical Fluency: Operations with Decimals, the "Adding, Tenths" activity gives students a chance to add decimals repeatedly to complete a triangle puzzle.
- The materials for grade 7 include Benchmark Assessments that provide opportunities for retrieval of previously learned concepts across units. This section includes assessments for the beginning, middle, and end of the course to allow students to retrieve prior learning while demonstrating recent learning.

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

- Lessons within grade 7 include concept and skills practice that require students to select and use diverse strategies, promoting the use of the most efficient strategy rather than relying on a single strategy for every problem. For example, in the "Intervention, Armadillo Crossing" lesson of the Volume unit, students play interactive games to practice solving for both area and perimeter in the same problems with different geometric figures.
- Lessons in the materials include opportunities for students to select and use diverse strategies, promoting the use of the most efficient strategy rather than relying on a single strategy for every problem. For example, in Ratios, Rates, and Percents students revisit and

apply more than one way to describe and represent ratios and percents using concepts and skills involving concrete models, fractions, and decimals. The understanding of concepts and skills is reiterated with increasing complexity as students apply the concepts and skills in real-world problems and generate equivalent forms of fractions, decimals, and percents.

- The materials provide opportunities for frequent and short interleaved practice of concepts and skills across units through Spiraled Review. For example, in Volume, the spiraled review states that "students will review concepts and material from previous math classes and units to help support their work in the current unit." This review engages students in finding the area and circumference of circles, modeling inequalities, and solving inequalities.

Balance of Conceptual and Procedural Understanding

5.1	Development of Conceptual Understanding	18/18
5.1a	Questions and tasks require students to interpret, analyze, and evaluate a variety of models and representations for mathematical concepts and situations.	**12/12**
5.1b	Questions and tasks require students to create a variety of models to represent mathematical situations.	**2/2**
5.1c	Questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts.	**4/4**

Questions and tasks require students to interpret, analyze, and evaluate a variety of models and representations for mathematical concepts and situations. Questions and tasks require students to create a variety of models to represent mathematical situations. Questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts.

Evidence includes, but is not limited to:

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

- The materials provide questions that require students to use various models and representations to interpret, analyze, and evaluate mathematical concepts and situations. For example, Grade 7, Similar Figures, Explore 1 instructs students to identify attributes of similarity, find similarities, and use scale factor to identify sizes of figures. The activity asks students to interpret and analyze the process used, as evidenced by "Can you use addition or subtraction to find the scale factor?"
- Grade 7, Two-Step Equations and Inequalities, Home, Content Support demonstrates how teachers guide students to solve one and two-step equations using models to represent the equations. Students must interpret and analyze connections between models and inverse operations to explain that an equation must remain balanced. Additionally, students are required to evaluate solutions to equations and verify that the solutions make the equation equivalent on both sides.
- Grade 7, "Two-Step Equations and Inequalities is divided into four categories for student exploration: solving equations using number lines, solving equations using number lines, solving inequalities using models, and solving inequalities using number lines. Tasks assigned to students in these sections utilize counters and number lines to interpret situations, analyze, and evaluate equations and inequalities.

Questions and tasks require students to create a variety of models to represent mathematical situations.

- Questions require students to create various models to represent mathematical situations. For example, Grade 7, Proportional Relationships, Explore 3 includes a Student Journal which asks students to create a table, equation, and graph to represent a written description.
- A Spiraled Review in every unit provides questions that require students to create a variety of models to represent mathematical situations. For example, Grade 7, Circles, Elaborate, Spiraled Review asks students to create an equation that represents a story problem while finding the solution. Another question in the review asks students to write a situation that could represent a model equation.
- Grade 7, Area, Explain, Show What You Know gives students the task of taking irregular 2D figures and decomposing them into smaller shapes, or composing them into larger shapes. In this task, students are creating their conceptual models based on the given model, before being asked to create a 2D net of a given 3D figure.

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

- The materials include questions that prompt students to apply conceptual understanding to new situations and contexts. For example, Grade 7, Circles, Explore 4 embeds the following guiding question that encourages students to apply understanding and justify explanations: "How do you know when to calculate the circumference of a circle and when to calculate the area of a circle?"
- The "Elaborate" and "Evaluate" sections of each unit include tasks with varied situations and contexts for students to apply conceptual understanding. For example, Grade 7, Two-Step Equations and Inequalities, Elaborate contains three PhET simulation activities that involve weights of shapes. Students are asked to use a digital scale to understand the representations, create models of equations, and reflect on the effect of changing the value of a variable. Grade 7, Two-Step Equations and Inequalities, Evaluate, Mathematical Modeling Task presents a scenario in which students determine the cost of flooring from a home floor plan. Students must use their knowledge of composing and decomposing composite figures to properly identify the area of various surfaces in the house and calculate cost for covering those surfaces.

Balance of Conceptual and Procedural Understanding

5.2	Development of Fluency	12/12
5.2a	Materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level tasks.	**2/2**
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.	**3/3**
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.	**6/6**
5.2d	Materials contain embedded supports for teachers to guide students toward increasingly efficient approaches.	**1/1**

The materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level tasks. Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within the lesson and/or throughout a unit. Materials provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson and throughout a unit. Materials contain embedded supports for teachers to guide students toward increasingly efficient approaches.

Evidence includes, but is not limited to:

Materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level tasks.

- Grade 7 materials include Daily Numeracy tasks designed to build the automaticity needed to complete grade-level tasks. This daily practice, combined with Spiraled Review tasks, prompts students to recall content skills while building automaticity.
- Each unit contains student tasks that target specific skills and build fluency necessary to complete grade-level tasks. For example, Rational Numbers, Elaborate provides two fluency builders. The "Go Fish!" games are designed to play with a partner and rehearse target skills in the unit. Also, Proportional Relationships, Elaborate provides two partner-based fluency builder tasks involving multiple questions and matching cards on proportional relationships.
- Grade 7 materials provide three Mathematical Fluency sections (fractions, decimals, and integers) that offer students tasks to engage with fact fluency. The sessions reinforce strategies through discussions and visual models while allowing students to gain automaticity and fluency through games and everyday applications. Student and teacher tracking documents allow teachers to monitor and students to take ownership of their fluency.

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

- The materials include activities that require manipulatives for hands-on exploration of concepts which develops procedural skills along with efficiency mathematical procedures. For example, Rational Numbers, Intervention, Interactive Skill Review allows students to play interactive games to practice math skills that include previous grade-level standards vertically aligning with the current grade-level unit. This also aids students in interleaved practice and applying procedures efficiently.
- Students are provided with opportunities to apply flexible mathematical procedures within lessons. For example, Grade 7, Proportional Relationships, Explore 1 gives students the option of using unit rates, tables, or proportions to identify equivalent rates.
- Students practice accurate mathematical procedures within lessons. For example, Proportional Relationships, Evaluate, Mathematical Modeling Task instructs students to verify their understanding of the relationships they represent as evidenced by the question, "Who will get to 48 miles first? How many hours will it take each racer to get to 48 miles? Justify your answer."

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

- Within lessons and throughout each unit, the materials provide strategic questions for teachers that prompt students to consider alternative strategies, think critically about efficient approaches, find alternate solutions, and apply procedures to different situations. For example, Volume, Home contains depth of knowledge leveled questions that evaluate procedures, processes, and solutions like, "How can the relationship between the volume of a triangular prism and a triangular pyramid be explained verbally and symbolically?"
- Within the lessons and throughout the unit, Depth of Knowledge questions for teachers prompt students to evaluate procedures, processes, and solutions for flexibility. For example, Grade 7, Proportional Relationships, Explore 1 asks students to consider, "What strategy can you use to convert 75 liters to the number of pints needed in the ticket booth painting scenario?" with guidance that answers vary.
- Throughout the units, the materials incorporate digital tasks and activities that provide immediate feedback as students evaluate the efficiency and accuracy of their solutions in real time. For example, Mathematical Fluency – Operations With Decimals, Adding, Hundredths-Assessment gives 25 fill-in-the-blank questions that show a colored dot when answered. A green dot indicates correct answers, while a red dot indicates incorrect answers. To provide flexibility, students may move forward and backward through the questions to check and recheck answers before completing the task.

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

- The materials provide support for teachers in understanding strategies that lead to increasingly efficient approaches. For example, Rational Numbers, Home, Content Support provides a video, visual examples of strategies, and embedded professional development resources for teachers that focus on strategies for guiding students toward efficiency with computations related to rational numbers.
- The Teacher Guide for each unit identifies questions for teachers to guide students toward efficient processes while assessing understanding. For example, Ratios, Rates, and Percents, Scope Overview, Teacher Guide provides the questions, "How do you identify the part, percent, and whole?" and "How can you use proportional relationships to solve percent problems?"
- Mathematical Fluency Operations with Integers is divided into tabs for adding, subtracting, multiplying, dividing, and all operations. The materials offer embedded support for teachers to guide students toward increasingly efficient approaches. The "Student Mathematical Maze" instruction sheet notes that each problem has at least one possible solution and encourages students to compare solution pathways with classmates and "decide whether you have found the most efficient solution pathway."

Balance of Conceptual and Procedural Understanding

5.3	Balance of Conceptual Understanding and Procedural Fluency	16/16
5.3a	Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed.	**2/2**
5.3b	Questions and tasks include the use of concrete models and manipulatives, pictorial representation (figures/drawings), and abstract representations.	**6/6**
5.3c	Materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numeric/algorithmic) concepts.	**8/8**

The materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed. Questions and tasks include the use of concrete models and manipulatives, pictorial representation (figures/drawings), and abstract representations. Materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numeric/algorithmic) concepts.

Evidence includes, but is not limited to:

Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed.

- Each Content Unwrapped has "Implications for Instruction" that state how the conceptual emphasis of the TEKS are addressed. For example, Non-Proportional Relationships, Home, Content Unwrapped, Implications for Instruction asserts that, according to TEKS 7.7a, students should understand that each representation communicates the same relationship between independent and dependent quantities and "should move fluently from one representation to another."
- The scope and sequence provided in grade 6 materials maps out how each lesson, activity, or resource aligns with TEKS. The Content Unwrapped includes several sections that state how conceptual and procedural emphasis of the TEKS are addressed. For example, Area, Home, Content Unwrapped uses Dissecting the Standard to outline the breakout skills, procedures for students, and academic vocabulary for TEKS 7.9c and 7.9d.

Questions and tasks include the use of concrete models and manipulatives, pictorial representation (figures/drawings), and abstract representations.

- Materials incorporate the use of concrete models, pictorial representations, and abstract representations to answer questions. For example, Two Step Equations and Inequalities, Explain, Show What You Know provides questions that call for using algebra tiles, drawing models, and showing algebraic representations of solving equations.
- Tasks in grade 7 include hands-on activities with models or manipulatives that represent mathematical concepts. For example, Angle Relationships, Explore tasks ask students to

progress through using cut-out triangles and protractors, drawing models of triangles, and writing and solving equations around missing angles of triangles as they work toward the abstract concept.

- Tasks and questions throughout grade 7 include the use of manipulatives, pictorial representations, and algebraic representations. For example, Circles, Explore 3, Student Journal facilitates students cutting equal pie pieces of a circle and reshaping them into parallelogram-like figures to show how the area formula of a parallelogram relates to the area formula for a circle. Students use the pictorial representation to identify the parts of the circle to create the formula. Then, students use the abstract formula to solve for the area of circles when dimensions are given without pictures or models.

Materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numeric/algorithmic) concepts.

- Circles, Explore 3, Student Journal facilitates students cutting out equal pie pieces of a circle and reshaping them into a parallelogram to show the connection between the area with a parallelogram and area with a circle. Students are also given pictorial representation and asked to define the parts of the circle and create a formula to solve area problems without models. Finally, students are asked to explain how the concrete parallelogram they created from pie pieces connects to the abstract area formula for a circle.
- The materials provide opportunities for students to articulate their emerging understanding of abstract mathematical concepts and procedures through creating models, explaining procedures, and practicing. For example, in Similar Figures, Explore 2 students must use language to define scale factor, explain how scale factor is affected when a concrete map gets larger or smaller, and connect how models are affected by different scale factors.
- The Mathematical Modeling Task under Evaluate in each unit allows students to engage in tasks designed to help them connect, define, and explain concrete and representational models to abstract concepts. For example, Two-Step Equations and Inequalities, Evaluate, Mathematical Modeling Task guides teachers to prompt students to "choose the number of students that Diya could read to in the library," so that they define an inequality that will connect to the concrete number of books. There is also guidance to "allow each group to share its solution" and discuss how each group tackled the challenge.

Balance of Conceptual and Procedural Understanding

5.4	Development of Academic Mathematical Language	14/14
5.4a	Materials provide opportunities for students to develop their academic mathematical language using visuals, manipulatives, and other language development strategies.	**3/3**
5.4b	Materials include embedded guidance for the teacher addressing scaffolding and supporting student development and use of academic mathematical vocabulary in context.	**2/2**
5.4c	Materials include embedded guidance for the teacher 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.	**9/9**

The materials provide opportunities for students to develop their academic mathematical language using visuals, manipulatives, and other language development strategies. Materials include embedded guidance for the teacher addressing scaffolding and supporting student development and use of academic mathematical vocabulary in context. Materials include embedded guidance for the teacher 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.

Evidence includes, but is not limited to:

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

- The Explain section of each unit provides opportunities for students to develop academic language using visuals with Picture Vocabulary. For example, Angle Relationships, Explain, Picture Vocabulary includes a slideshow with visual representations and digitally manipulative flashcards that allow students to independently practice and develop mathematical language.
- The Explain section of each unit provides opportunities for students to develop mathematical language using visuals and manipulatives with Language Connections. Language Connections contains handouts for each language proficiency level and correlates to the unit vocabulary and context. For example, the Angle Relationships, Explain, Language Connections handout for beginners includes a matching activity with vocabulary and visual representations of angle pairs that allow students to use protractors for measuring angles. Also included is a story with visuals for both academic and everyday vocabulary with a word bank to complete a summary describing vocabulary words.
- The materials include Language Supports that allow students to develop mathematical vocabulary by first creating a need for the language. This is accomplished through

opportunities for reading and listening to new words in context. Students then apply those words in speaking and writing. For example, Angle Relationships, Explore 1 encourages students to use the terms from the word wall and anchor chart to discuss responses with peers before completing student journals.

Materials include embedded guidance for the teacher addressing scaffolding and supporting student development and use of academic mathematical vocabulary in context.

- The Language Connections in each unit guide teachers in scaffolding and supporting student development and use of academic vocabulary. For each language proficiency level, different prompts are given for teachers to use with students. For example, in the Angle Relationships, Explain, Language Connections section for students with beginner language proficiency, teachers are instructed to point to words, define the words, and "draw a line from the words to the matching picture."
- The materials include descriptions of new mathematical vocabulary for a word wall to support student use of academic vocabulary in the Implementation Guide provided under Essentials in the Teacher Toolbox. There is more evidence of embedded teacher guidance as it points out that each Explore activity includes facilitation points for the teacher to attach academic vocabulary to the student's experiences during instruction. The guide further points out that the Explore activities include discussion prompts for teachers to guide students in communicating with academic language and embedded strategies to help emergent bilingual learners acquire new vocabulary.

Materials include embedded guidance for the teacher 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 Language Connections in each unit offer embedded guidance for the teacher to support mathematical conversations and provide opportunities for students to hear, refine, and use mathematical language with peers. Guidance is provided for students at beginner, intermediate, and advanced levels of listening, reading, speaking, and writing. For example, Angle Relationships, Explain, Language Connections gives multiple prompts for teachers to point and explain as students work to improve language with listening. To aid students in reading and speaking, there is also a list of several teacher prompts followed by the sentence stem students should utilize in response.
- The Content Support highlights the mathematical vocabulary and syntax developed within the unit and identifies academic vocabulary from prior units to support students in building their math language toolkit. For example, Area, Home, Content Unwrapped includes a list of vocabulary, both verbs and nouns with definitions, that students need to know to develop their mathematical language.

- The materials offer a set of discussion questions to facilitate discourse without limiting student responses, guiding students to exemplar responses to questions and tasks using developed mathematical language. For example, Proportional Relationships, Explore 1 contains a Math Chat with prompts for teachers including, "How does using a unit rate make price comparison easier?" This is followed by the exemplar response of, "You can compare different sizes easily because you know how much you are paying per unit."

Balance of Conceptual and Procedural Understanding

5.5	Process Standards Connections	6/6
5.5a	Process standards are integrated appropriately into the materials.	**1/1**
5.5b	Materials include a description of how process standards are incorporated and connected throughout the course.	**2/2**
5.5c	Materials include a description for each unit of how process standards are incorporated and connected throughout the unit.	**2/2**
5.5d	Materials include an overview of the process standards incorporated into each lesson.	**1/1**

Process standards are integrated appropriately into the materials. Materials include a description of how process standards are incorporated and connected throughout the course. Materials include a description for each unit of how process standards are incorporated and connected throughout the unit. Materials include an overview of the process standards incorporated into each lesson.

Evidence includes, but is not limited to:

Process standards are integrated appropriately into the materials.

- Process standards are included in all parts of the materials, including lessons, student practice, and assessments. This is evidenced through the Teacher Guide, where the process standards are embedded in the lesson guides through all the activities. For example, in Volume, Scope Overview, Teacher Guide under the Explore 1 heading, the Standards of Mathematical Practice reads, "MP.2 Reason abstractly and quantitatively."
- The Grade 7, Scope and Sequence, found in the Curriculum Design section of the Teacher Toolbox, provides a template outlining the units in grade 7 and the standards, including process standards, that are integrated into each part of the materials. For example, the Proportional Relationships unit in the guide shows that Explore 1 integrates TEKS 6.1ABCEDFG, Explore 2 integrates TEKS 6.1ABDF, and Explore 3 integrates TEKS 6.1ABCDEFG.

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

- The materials provide an overview and explanation of how the process standards are embedded throughout the course, including how the process standards connect to the content standards. For example, the "Process Standards" tab in the Teacher Toolbox shares how in Grade 7, Circles, students analyze relationships to communicate ideas. It states, "Describing the distance around a circle requires concentrated analysis of the relationship between the radius, diameter, and the circumference of a circle."

- Teacher Toolbox, Essentials, Curriculum Design contains an Implementation Guide with a section on Standards Aligned. This section states that "the mathematical process standards are woven throughout our materials with the goal of building foundational skills that create effective thinkers in math." The process standards are listed in full along with a description of how they are incorporated and connected throughout the program.
- Throughout the course, materials identify each process standard addressed as evidenced by the teacher directions, below Description and above Materials, where each process standard embedded in the activity is listed. For example, in Similar Figures, Explore 1 the process standards relating to this activity are listed as 7.1A, 7.1B, and 7.1D.

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

- The Teacher Toolbox contains a "Process Standards" tab which includes the description and vertical alignment of how the standards are incorporated and connected throughout each lesson and unit. For example, under Grade 7, Rational Numbers, the process standard 7.1G is identified along with a list of processes students should use in communication. Teacher guidance is given to students to explain how to solve problems with rational numbers including problems with negatives.
- The Content Support page of each unit, in addition to readiness and supporting standards, background knowledge, misconceptions, and terms to know, gives each process standard and a description of how students meet that process standard in the unit. For example, Ratios, Rates, and Percents, Content Support, Applying Mathematical Process Standards lists process standard 7.1E and follows with a description that students should use diagrams, proportions, and equations to organize and communicate mathematical ideas about percents.

Materials include an overview of the process standards incorporated into each lesson.

- The Explore lessons of each unit show the process standards incorporated at the beginning of the teacher directions. There is evidence of the use of these standards throughout the lesson in questions, activities, and assessments. For example, Volume, Explore 1 states the use of process standards 7.1ACF.
- Grade 7 materials provide specific strategies, activities, and problems for integrating the process standards into the lessons. For example, Determine Probability includes different ways for students to model the probability of simple and compound events using a variety of tools such as two-color counters, dice, decks of cards, marbles, and virtual spinners.
- The "Process Standards" tab in the Teacher Toolbox provides an overview with specific examples of how the process standards are incorporated and connected throughout each lesson. For example, in Process Standards – Analyze Relationships to Communicate Ideas, Grade 7, Determining Probabilities an incorporation description given is, "students should have multiple opportunities to physically use number cubes, marbles, cards, spinners, coins,

or manipulatives to concretely make connections to the probability of a simple or compound event."

Productive Struggle

6.1	Student Self-Efficacy	15/15
6.1a	Materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics.	**3/3**
6.1b	Materials support students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks.	**6/6**
6.1c	Materials are designed to require students to make sense of mathematics through doing, writing about, and discussing math with peers and teachers.	**6/6**

The materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics. Materials support students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks. Materials are designed to require students to make sense of mathematics through doing, writing about, and discussing math with peers and teachers.

Evidence includes, but is not limited to:

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

- The materials identify high-leverage errors or misconceptions students may have and provide pre-planned teacher moves towards a solution. This allows students to think mathematically about identifying necessary operations and persevere through solving problems as they learn to make sense of the mathematical operations. For example, Rational Numbers, Home, Content Support points out that students may struggle to both divide numerators and denominators, rather than multiplying by the reciprocal, and identify the necessary operations for solving a problem. The pre-planned teacher moves embedded in Rational Numbers, Explore, Explore 4, Student Journal provides reflection questions for students to give examples of real-world situations involving multiplying integers.
- The lessons in the materials challenge student thinking and problem-solving through real-world scenarios and various stimuli (tables, graphs, diagrams). For example, Proportional Relationships, Explore, Explore 1 presents "Grocery Note" cards showing prices of two different stores for students to compare. In their journal, students record given rates and calculate unit rates. Students persevere while completing comparisons amongst four stores and then make sense of their unit rate usage on the "Reflect" page.
- The materials encourage students to persevere in extending and applying the concepts learned to solve real-world problems. One example is the Rational Numbers, Evaluate, Mathematical Modeling Task in which students incorporate rational numbers in deciding if a new phone is a feasible purchase with a particular trade-in promotion. Through productive struggle, students are encouraged to persevere while tackling high-leverage questions embedded in scenarios.

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

- The materials include questions that require students to explain and justify that there are multiple ways to solve a problem. For example, Ratios, Rates, and Percents, Explore 6 utilizes simple and compound interest formulas. As students use the formulas, teachers are instructed to ask if "order matters when multiplying the principal, rate, and time? Why or why not?" Such lesson questions have students explain their understanding of multiplication properties in which different expressions lead to the same solution.
- Lessons involve tasks that support students in understanding that there are multiple ways to solve a problem. For example, Proportional Relationships, Explore 3 asks students to interpret situations involving proportional relationships and display data through various methods, including constant of proportionality, tables, equations, and graphs. Students then answer questions explaining how the different representations show the same proportion.
- Grade 7 materials include tasks and questions where students practice representing, writing, and discussing their thinking. For example, Proportional Relationships, Explore 1 asks students to complete various challenging tasks involving use of both tables and algebraic calculations to find the constant of proportionality before formulating written explanations to justify solutions. A "Math Chat" also accompanies the lesson to give students practice explaining verbally.

Materials are designed to require students to make sense of mathematics through doing, writing about, and discussing math with peers and teachers.

- The materials include tasks requiring students to make sense of mathematical concepts while doing math by actively engaging in hands-on activities. For example, Two-Step Equations and Inequalities, Explore 3 uses virtual and physical algebra tiles to explore two-step inequalities. Peer groups of two or three students make sense of mathematics by doing math with algebra tiles to model steps physically and write algebraic steps. Then, students discuss and write their solutions to present to the class and teacher.
- Active engagement through hands-on activities in the lessons requires students to make sense of mathematical concepts through writing. For example, Similar Figures, Explore 1 divides students into peer groups to find three pairs of signs from a set of "National Park Signs" using scale factor. Students are then prompted to make sense of their work by writing answers to reflection questions in their journals with peers before discussing the writing with the class and teacher.
- Lessons provide opportunities for classroom discourse where students make sense of mathematics by discussing different solution strategies, make connections, and engage in collaborative learning with peers and their teacher. For example, Proportional Relationships, Explore 1" guides teachers to "ask students to share their strategies and encourage students to ask each other questions and make connections." Students calculate unit rates and represent them in tables while discussing and collaborating with their peer groups. At the

lesson's close, the class participates in a "Math Chat" to discuss their learning with the teacher.

Productive Struggle

6.2	Facilitating Productive Struggle	10/10
6.2a	Materials support teachers in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications.	**6/6**
6.2b	Materials offer prompts and guidance to assist teachers in providing explanatory feedback based on student responses and anticipated misconceptions.	**4/4**

The materials support teachers in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications. Materials offer prompts and guidance to assist teachers in providing explanatory feedback based on student responses and anticipated misconceptions.

Evidence includes, but is not limited to:

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

- Grade 7 materials include open-ended tasks and assessments, providing opportunities for students to share and reflect on their problem-solving approaches. For example, Proportional Relationships, Evaluate, Mathematical Modeling Task gives small groups of students two problems in which they use graphs and tables to determine who will get to a distance of 48 miles first. Instructions state that students should reflect on their journals for support and share thoughts within their small group. Students provide explanations of whether the relationships are proportional or not, argue how many hours it will take each racer to reach 48 miles, and reflect with justifications on their solution using a written response.
- Each unit contains questions to support teachers in guiding students to share explanations, arguments, and justifications. For example, Proportional Relationships, Explore 2 includes a "Math Chat" with guiding questions that ask students to "explain what is different when converting between the standard measurement system to the metric system" and argue what real-life situations require you "to convert between the metric and standard measurement system." With each question, teachers prompt students to justify their answers.
- The materials provide guidance for teachers to support students in reflecting and sharing their problem-solving approaches. For example, "Determine Probability, Acceleration, Would You Rather" encourages students to use mathematical reasoning connected to the probability of simple events and complements to provide justifications of their answers as they decide to be on either Isabella's or Sai's team. Students are asked to share their answers and justifications with partners.

Materials offer prompts and guidance to assist teachers in providing explanatory feedback based on student responses and anticipated misconceptions.

- Each unit contains a Heat Map that allows students to analyze their assessment responses, including those that occurred due to misconceptions. The "Procedure and Facilitation Tips" for the heat map assists teachers in providing explanatory feedback based on these student responses while referring to the Scaffolded Instruction Guide for additional prompts, guidance, and resources. For example, Proportional Relationships, Evaluate, Heat Map guides teachers to "encourage students to look for patterns in their data...and use this information to reflect and set goals in the provided table." Teacher guidance is then given to consult with students to provide one-on-one or small-group explanatory feedback based on students' responses.
- The materials include teacher guidance on anticipated misconceptions and prompts for addressing them through explanatory feedback. For example, Angle Relationships, Engage, Foundation Builder states the anticipated misconception, "Students may not understand that the interior angles of all triangles should have sums of 180 degrees." Immediately following, the teacher prompt for explanatory feedback states, "Show examples of multiple types of triangles, and label all of the angle measurements. Model how the sum of interior angles of a triangle is always 180 degrees."
- The materials include information on anticipated misconceptions students may have in each unit. Teacher guidance and explanatory feedback prompts are found in each Explore lesson's Instructional Supports section. For example, Two-Step Equations and Inequalities, Explore 2 includes guidance in the Instructional Supports section that reminds teachers that students having difficulty converting verbal descriptions to algebraic expressions. When this occurs, teacher prompts are provided to encourage students to represent the word problems with a model before creating an equation or expression.