IMRA Review Cycle 2024 Report

Publisher Name	Program Name
Kiddom	*Texas Math: Algebra Supports Powered by Kiddom*
Subject	**Course**
Mathematics	Algebra I

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

English Language Proficiency Standards (ELPS) Coverage: **84.62%**

Quality Review Overall Score: **135 / 227**

IMRA Reviewers

Flags for Suitability Noncompliance 6

Indicator	Count of Flags
1. Prohibition on Common Core	**6**
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 0

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

Alleged Factual Errors 9

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	40 / 53
2. Progress Monitoring	8 / 28
3. Support for All Learners	14 / 32
4. Depth and Coherence of Key Concepts	8 / 23
5. Balance of Conceptual and Procedural Understanding	44 / 66
6. Productive Struggle	21 / 25

Strengths

- 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.

Challenges

- 1.1 Course-Level Design: Materials do not include a scope and sequence outlining the TEKS and ELPS or suggested pacing for various instructional calendars. Materials do not explain how concepts connect throughout the course. There is no guidance for unit internalization or resources and guidance to support administrators and instructional coaches implementing the designed materials.
- 1.2 Unit-Level Design: Materials do not include comprehensive unit overviews that provide the academic vocabulary necessary to effectively teach the concepts in the unit. Materials do not contain supports for families in Spanish for each unit with suggestions on supporting the progress of their student.
- 1.3 Lesson-Level Design: Materials do not include a lesson overview outlining the suggested timing for each lesson component.
- 2.1 Instructional Assessments: Materials do not include formative assessments at the unit level or diagnostic and summative assessments at the lesson or unit levels. Materials do not include teacher guidance to ensure accurate administration of instructional assessments. Materials do not include assessments aligned to the TEKS or assessments that vary in levels of complexity.
- 2.2 Data Analysis and Progress Monitoring: Instructional assessments and scoring information do not provide guidance for interpreting student performance or

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

- 3.1 Differentiation and Scaffolds: Materials do not include teacher guidance for differentiated instruction, scaffolding, and activities for students below or above grade-level proficiency. They also do not provide pre-teaching or support for unfamiliar vocabulary and language in the text.
- 3.3 Support for Emergent Bilingual Students: Materials do not include teacher guidance on providing linguistic accommodations or implementation guidance to support teachers in effectively using materials in state-approved bilingual/ESL programs. Materials do not include support for Emergent Bilingual students in developing academic vocabulary, increasing comprehension, building background, or making cross-linguistic connections.
- 4.1 Depth of Key Concepts: Materials do not include questions and tasks that progressively increase in rigor.
- 4.2 Coherence of Key Concepts: Materials do not demonstrate coherence across units, failing to connect key concepts, past and future content, and prior knowledge to new skills.
- 4.3 Spaced and Interleaved Practice: Materials do not provide spaced retrieval or interleaved practice opportunities with previously learned skills and concepts across units.
- 5.1 Development of Conceptual Understanding: Questions and tasks do not require students to evaluate diverse models and representations of mathematical concepts.
- 5.2 Development of Fluency: Materials do not provide tasks to build student automaticity for grade-level work and don't offer opportunities to evaluate procedures for efficiency, flexibility, and accuracy.
- 5.3 Balance of Conceptual Understanding and Procedural Fluency: Materials do not explicitly state how the conceptual and procedural emphasis of the TEKS is addressed. Questions lack concrete models and manipulatives, and there is no support for students to connect and explain concrete models to abstract concepts.
- 5.4 Development of Academic Mathematical Language: Materials do not include opportunities for students to develop math language with manipulatives and don’t provide guidance on scaffolding vocabulary or supporting student responses with exemplars.
- 5.5 Process Standards Connections: Materials do not include descriptions of how process standards are incorporated and connected across the course, units, and lessons.
- 6.1 Student Self-Efficacy: Materials do not support students in justifying that there can be multiple ways to solve problems and complete tasks.
- 6.2 Facilitating Productive Struggle: Materials do not provide prompts and guidance to assists teachers in providing explanatory feedback on anticipated misconceptions.

Summary

IM360 Texas Math powered by Kiddom is a 9–12 Mathematics program designed to support high school students in mastering Algebra. This program demonstrates several characteristics of high-quality instructional materials. Kiddom's Algebra Supports curriculum aligns with current educational standards, integrates digital-first strategies, and provides scaffolding for students and teachers.

Campus and district instructional leaders should consider the following:

- The program excels in promoting mathematical discourse, offering teachers embedded guidance to foster discussions where students share their reasoning, reflect on problem-solving strategies, and engage in mathematical conversations. Kiddom's interactive digital platform encourages student engagement through various multimedia resources and dynamic learning tasks. The program also offers self-checks, during which students can get immediate feedback on correct and incorrect answers.
- The materials lack a strong emphasis on building automaticity—students' ability to recall key facts and procedures quickly, which could hinder their fluency in more complex tasks. The materials also do not consistently provide in-depth practice opportunities, particularly for students needing more rigorous challenges or those ready to advance their skills. These areas present an opportunity for further growth to enhance the program's effectiveness.

Intentional Instructional Design

1.1	Course-Level Design	6/15
1.1a	Materials include a scope and sequence outlining the TEKS, ELPS, concepts, and knowledge taught in the course.	**3/5**
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).	**1/2**
1.1c	Materials include an explanation for the rationale of unit order as well as how concepts to be learned connect throughout the course.	**1/2**
1.1d	Materials include guidance, protocols, and/or templates for unit and lesson internalization.	**1/2**
1.1e	Materials include resources and guidance to support administrators and instructional coaches with implementing the materials as designed.	**0/4**

The materials include a scope and sequence outlining the concepts and knowledge taught in the course. Materials do not include a scope and sequence outlining the TEKS and ELPS. Materials include suggested pacing (pacing guide/calendar). Materials do not 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. Materials do not contain an explanation for how concepts to be learned connect throughout the course. Materials include guidance, protocols, and/or templates for lesson internalization. Materials do not include guidance, protocols, and/or templates for unit internalization. Materials do not 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.

- The "Course Guide" includes scope and sequence materials under "About These Materials," outlining concepts and knowledge taught in the course, but does not include the TEKS or ELPS.
- The scope and sequence give a broad overview of the year, showing which units should be taught during which weeks with the number of days.

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 "Course Guide" includes a pacing calendar that offers calendars for three different courses but does not provide varying instructional calendars for this course to support effective implementation.
- The materials provide a scope and sequence with a suggested pacing guide for a 144 instructional calendar. The materials do not include suggested pacing for various instructional calendars.

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

- The "Course Guide" materials include a rationale for unit order.
- The materials contain a rationale for the unit order in the "Scope and Sequence" section and dependency diagram.
- Although the materials contain a brief rationale for the unit order in the scope and sequence section, they do not explain how the concepts connect throughout the course.
- The "Scope and Sequence" section contains a chart describing unit progression.

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

- In each lesson narrative, there is guidance for lesson internalization. The narrative includes the lesson's purpose, the learning target, and how it connects to prior learning. For example, in the section "Getting to Know You: Human Box Plot," the purpose is explained, and a description of how students will engage in the objective is included, as well as connections to previous work. The narrative also addresses the unit tasks where "students interpret, analyze, compare, and contrast different representations of data" and "create a human box plot."
- The materials contain guidance for lesson internalization. There is a narrative in each unit that gives the purpose for that specific lesson. For example, in "Unit 2, Lesson 1," the narrative starts by stating, "The mathematical purpose of this lesson is for students to review their understanding of the meaning of operations and expressions with operations on variables and to practice extracting important information from situations."
- Lessons begin with references to the lesson's purpose, how it ties into future lessons, and suggested questions for teachers to ask. "Unit 3, Lesson 3" shows an example as it says, "This lesson prepares students to create lines of best fit and use them to make predictions about a relationship in an upcoming Algebra 1 lesson."
- The materials do not contain guidance for unit internalization.

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

- The lesson narratives provide internalization for students, teachers, and parents. Materials do not include resources and guidance to support administrators or instructional coaches with implementing the materials as designed.

Intentional Instructional Design

1.2	Unit-Level Design	1/4
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.	**1/2**
1.2b	Materials contain supports for families in both Spanish and English for each unit with suggestions on supporting the progress of their student.	**0/2**

The materials include comprehensive unit overviews that provide the background content knowledge to effectively teach the concepts in the unit. Materials do not include comprehensive unit overviews that provide the academic vocabulary necessary to effectively teach the concepts in the unit. Materials do not include support for families in Spanish 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.

- Materials include comprehensive unit overviews that provide background content knowledge. For instance, the "Unit 1 Lesson Narrative" references background knowledge: "Students begin the course with one-variable statistics, building on ideas from middle school." Although the lessons provide a vocabulary section, the unit overviews have no academic vocabulary.
- The lesson overviews in the appendix for lesson 1.2 incorporate some academic vocabulary relevant to statistical concepts, such as "symmetric," "skewed," and "bimodal," but there is no dedicated section for academic vocabulary in the unit overview.

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

- The "Information for Families" section in the *Teacher Guide* provides support materials in English, with an overview of the unit's math content and a problem for families to work on with their students.
- The "Family Support Materials" in Unit 1 are blank and do not provide support materials for families in Spanish.

Intentional Instructional Design

1.3	Lesson-Level Design	33/34
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.	**0/1**
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 do not 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 deliver the lesson effectively. Materials include guidance on the effective use of lesson materials for extended practice including, homework, extension, and 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.

- Detailed lesson plans in the *Teacher Guide* and individual lessons such as "Lesson 1.1" in "Unit 3" outline daily objectives, questions, tasks, materials, and assessments, including the "Cool Down" as stated in the "Course Overview: Teacher Guide."
- The lesson plans offer comprehensive information, like in "Unit 2, Lesson 1.1," which explains the purpose of the warm-up and provides step-by-step instructions in the "Student Facing Statement."
- Each lesson includes "Learning Goals" with daily objectives and "Required Materials" specifying supplies needed, for instance, "Unit 7, Lesson 22," which recommends graphing technology for students.
- The "Cool Down" section in each lesson includes instructional assessments and questions for students, along with tasks positioned after the "Warm-Up" and before the "Cool Down," enhancing the structured and detailed nature of the materials, for example, "Lesson 1.3" in "Unit 4."

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

- The "Lesson Overview" does not provide suggested timing for each lesson component. There is a scope and sequence that says, for example, "Unit 1 takes 13 days."
- The materials do not include day-by-day suggested timing or specific duration recommendations for individual lessons within the lesson overview or narrative sections.

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

- Teacher materials required for each lesson are detailed within the lesson plans. For instance, in the "Required Preparation" for the "Human Box Plot Activity," specific materials like slips of paper, index cards labeled with key terms, masking tape for a number line, and wide masking tape for creating a box are outlined.
- The lesson overview includes essential teacher materials, such as pre-printed slips cut from the blackline master PDF, as seen in "Unit 2, Lesson 2."

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

- "Lesson Synthesis" in each lesson guides teachers on ways to help students assimilate new insights into their broader understanding, offering suggestions like posing questions, written journal prompts, graphic organizers, and concept maps, for example, "Lesson 2.1" in "Unit 3."
- "Are You Ready For More" activities within each lesson serve as extension activities for students seeking additional challenges, as seen in the appendix under "Differentiation Activities."
- The "Assessment" section includes a set of practice problems for each lesson that can be used for homework or in-class practice. This allows teachers the flexibility to assign, collect, grade, or provide feedback as needed.

Progress Monitoring

2.1	Instructional Assessments	6/24
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.	**2/12**
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.	**1/2**
2.1d	Diagnostic, formative, and summative assessments are aligned to the TEKS and objectives of the course, unit, or lesson.	**1/6**
2.1e	Instructional assessments include standards-aligned items at varying levels of complexity.	**0/2**

The materials include a variety of formative assessments at the lesson level that vary in types of tasks and questions. Materials do not include formative assessments at the unit level. Materials do not include diagnostic or summative assessments that vary in types of tasks and questions at the lesson or unit levels. 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 do not include guidance to ensure accurate administration of instructional assessments. Diagnostic, formative, and summative assessments are not aligned with the TEKS of the course, unit, and lesson. Diagnostic, formative, and summative assessments are aligned to the objectives of the course, unit, and lesson. Instructional assessments do not 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.

- The materials reference diagnostic assessments at the unit level, specifically in the "Course Overview: Teacher Guide; Assessment" section under "How to Assess Progress." Additionally, at the beginning of each unit, there is mention of a diagnostic assessment called "Check Your Readiness" to evaluate prerequisite concepts and skills and assess students' prior knowledge of key concepts in the upcoming unit.
- Each lesson includes a formative assessment called a "cool-down" to assess understanding of the lesson. Teachers can use these cool-downs to provide feedback or plan further instruction. For example, in "Lesson 16: 16.3 Cool Down," students are asked to explain their reasoning for matching tables with expressions. The problems vary in difficulty and depth of knowledge. Teachers can grade these assessments in a standardized manner or use a more formative approach by asking students to explain their work.
- The materials do not include diagnostic assessments at the lesson level or formative assessments at the unit level. The materials reference diagnostic assessments in the course

overview; however, these cannot be located upon review. Similarly, no summative assessments were found, nor were there quizzes, tests, or projects at the unit level. For instance, the assessments page in the "Extra Support Materials for Algebra 1, Unit 2, Linear Equations, Inequalities, and Systems" was blank.

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

- The materials define and state the purpose of formative assessments, specifically cool-downs, in the "Course Overview: Teacher Guide: A Typical IM Lesson: Cool-Down" section. The cool-down task is given to students at the end of each lesson, to be completed independently in about five minutes and turned in.
- The intended purpose of the cool-down is to serve as a brief formative assessment to determine whether students understood the lesson, and teachers can use students' responses to inform further instruction and make data-driven decisions.

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

- The materials include teacher guidance for consistent administration for assessment types in the "Course Overview: Teacher Guide: Assessment: How to Assess Progress," including diagnostic: "Check Your Readiness," formative: "Cool-Down" and practice problems, and summative: end-of-unit/mid-unit assessments.
- The materials emphasize clear, consistent assessment design: targeted problems, clear wording, and distractors revealing misconceptions as seen in the "Course Overview: Teacher Guide: Assessment: Design Principles."
- Materials do not include specific guidance on ensuring accurate administration of cool-downs, which are the only assessments included in the materials. No summative or diagnostic assessments are included in the materials.

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

- Materials include formative assessments that align to unit and lesson objectives (e.g., creating expressions and completing tables). However, these assessments are not aligned with the TEKS. For example, Unit 2's objective ("Represent relationships ... using algebraic expressions") aligns with the unit's goals, not a specific TEKS standard. The materials do not include diagnostic assessments to gauge prior knowledge or summative assessments to evaluate student learning at the unit or course level comprehensively.

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

- The reviewed materials provide instructional assessments that include standards-aligned items. However, the assessments do not include varying levels of complexity (at least two). For instance, "Unit 1, Lesson 4.3: Cool Down" has one level of complexity.

Progress Monitoring

2.2	Data Analysis and Progress Monitoring	2/4
2.2a	Instructional assessments and scoring information provide guidance for interpreting and responding to student performance.	**1/2**
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.	**0/1**

Instructional assessments and scoring information provide guidance for responding to student performance. Instructional assessments and scoring information do not provide guidance for interpreting student performance. Materials provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments. Materials do not 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.

- The "Teacher Guide, Assessment" Tab provides guidance for teachers to respond to student performance during instruction. Teacher commentary accompanies tasks, offering insights into expected responses and potential misconceptions. The materials also address how to respond to specific student performance scenarios, as seen in "All Students Succeeding in Check Your Readiness."
- Instructional assessments do not include guidance for scoring or interpreting student responses to practice problems or formative assessments. For example, "Course Overview: Teacher Guide: How to Use These Materials: Activity Synthesis" does not include scoring rubrics or answer explanations.
- Sample student questions and responses do not include guidance on interpreting responses to assess understanding, as seen in "Unit 2.2 Launch."

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

- The materials provide guidance for educators to utilize included tasks and activities strategically based on learner performance data from assessments. This includes promoting the continued development of on-grade skills while simultaneously addressing identified weaknesses through targeted practice opportunities integrated within upcoming units (Course Overview: Teacher Guide: Assessment: Summative Assessment).
- The Teacher Guide's "Assessment" section offers specific strategies for educators to adapt instruction based on assessment results. For instance, the guide recommends suggesting

similar practice problems for further practice if cool-down activities indicate a lack of understanding.

- The materials offer guidance for teachers to use tasks and activities strategically based on student performance trends. This includes integrating practice for identified weaknesses within upcoming units while continuing with on-grade material (Course Overview: Teacher Guide: Assessment: Summative Assessment). Additionally, the Teacher Guide's "Assessment" section offers specific strategies for adapting instruction if cool-down activities reveal a lack of understanding (e.g., suggesting similar practice problems for further practice).

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

- The materials do not include tools for students to track their own progress and growth over time. Self-checking activities such as "Unit 5: Lesson 9: 9.2 Connect or Not: Launch" are included in the materials.
- The materials include opportunities for collaborative self-assessment within group activities such as "Unit 5: Lesson 9: 9.3 Think Like a Modeler," where students discuss and verify answers in groups. However, these instances are not part of a larger system for individual student tracking.

Supports for All Learners

3.1	Differentiation and Scaffolds	1/8
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.	**1/3**
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)	**0/2**
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.	**0/3**

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

- The materials lack teacher guidance in the online resources for differentiated instruction for students who have not yet reached proficiency on grade-level content and skills. For example, the "Course Overview: Teacher Guide" provides guidance in "Supporting Diverse Learners: Universal Design for Learning and Access for Students With Disabilities," which highlights the need for additional processing time for students with disabilities to achieve mastery.
- The materials suggest using visual aids such as images, diagrams, and vocabulary anchor charts to support conceptual processing and language development in the online resources. These aids are particularly beneficial for students with disabilities related to working or short-term memory, as stated in the "Course Overview: Teacher Guide: Supporting Diverse Learners: Universal Design for Learning and Access for Students With Disabilities." These accommodations are meant for Tier 1 instruction and do not directly address students who have not yet reached proficiency in grade-level content.
- The materials provide teacher guidance for differentiated paired (scaffolded) lessons in the online resources in "Supporting Diverse Learners: Principle 1: Support Sense Making," emphasizing the importance of scaffolded tasks and amplified language to aid students in making their own meaning and understanding mathematical concepts. An example of scaffolding from this section is the suggestion that teachers make language more accessible

for students by amplifying rather than simplifying speech or text. Simplifying includes avoiding the use of challenging words or phrases. Amplifying means anticipating where students might need language support to understand concepts or mathematical terms and providing multiple ways to access them.

- The instructional materials in the online resources do not contain integrated lessons and activities for students who are below grade level. Although there are optional activities that address below-grade-level concepts, such as those in "Lesson 1: Human Box Plot" and the Teacher Guide: "A Typical IM Lesson," these supports are not fully incorporated into the overall instructional strategy.

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

- Materials do not include pre-teaching or embedded supports in the online resources for unfamiliar vocabulary and references, including figurative language, idioms, and academic language.
- The online resources in the "Course Overview: Teacher Guide: Design Principles: Task Purposes and Task Purpose" include activities for formalizing definitions and practicing an academic mathematical language, but they are not designed to address unfamiliar vocabulary or references in the text.
- Guidance for supporting unfamiliar vocabulary is found in supplemental documents in the online resources, such as the "Course Overview: Teacher Guide," but these supports are not embedded within the lessons.
- Materials do not include integrated guidance in the online resources for supporting diverse learners and English language learners, such as in "Mathematical Language Development and Access for English Learners." While lesson narratives provide context, supports for unfamiliar vocabulary and references are not embedded.

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

- Materials do not include specific teacher guidance for differentiated instruction for students who have demonstrated proficiency in grade-level content and skills in the online resources, though some guidance is provided in the "Course Overview: Teacher Guide: How to Use These Materials: Are You Ready for More?", this section offers opportunities for differentiation, referring to extension problems as "mathematical dessert" that go deeper into grade-level mathematics.
- The online resources in the "Course Overview: Teacher Guide" provide guidance on mathematical modeling prompts. These prompts do not necessarily relate to the current unit of study and are not integrated into regular lesson plans for enrichment activities.
- Materials contain a page on guidance in the online resources for differentiation in "Supporting Diverse Learners," but there is no embedded evidence supporting differentiation, enrichment,

or extension activities specifically designed for students who have demonstrated proficiency in grade-level content and skills.

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).

- Materials include prompts and guidance to support the teacher in explicitly modeling the concepts to be learned. For example, "Lesson Algebra 1 Supports: Instructional Routines: Card Sort" provides detailed instructions on using card sorts for categorizing concepts and includes teacher demonstrations for initial activities. Another example is "Lesson Algebra 1 Supports: Instructional Routines: Notice and Wonder," which guides teachers to engage students in noticing and wondering about mathematical representations.
- The materials include prompts and guidance to support the teacher in explicitly communicating the concepts to be learned. For example, the "Course Overview: Course Guide: Unit 1: Lesson 1: 1.2 Human Box Plot" provides guidance on identifying the five-number summary and constructing box plots. It builds on prior knowledge and prepares students for future lessons. Teachers are instructed to guide students through creating a human box plot, reinforcing their understanding of the five-number summary and its components.
- The materials include prompts and guidance to support the teacher in explicitly communicating concepts to be learned. For instance, in "Unit 1: Lesson 1: 1.2 Human Box Plot: Launch," teachers follow specific steps to engage students in representing data. Another example is the "Unit 4 Teacher Guide: 1.1 Notice and Wonder: A Rocket Path Launch," which provides guidance to facilitate discussions and help students understand mathematical representations.

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

- The materials include guidance and recommendations for effective lesson delivery using a variety of instructional approaches. In the "Course Overview: Teacher Guide: How to Use These Materials: Launch Work Synthesize," it states, "Each classroom activity has three phases: The Launch, where the teacher ensures students understand the context and the problem; Student Work Time, with suggestions for grouping students; and Activity Synthesis, where the teacher helps students synthesize what they have learned."
- Materials include practice problems, as noted in the "Course Overview: Teacher Guide: How to Use These Materials: Practice Problems," which mentions, "Each lesson includes an associated set of practice problems. Teachers may assign practice problems for homework or extra practice in class, decide whether to collect and score them or provide answers for self-assessment. Distributed practice is more effective than massed practice."
- The materials include guidance on mathematical modeling prompts in the "Course Overview: Teacher Guide: Mathematical Modeling Prompts," which provides detailed steps to prepare and deliver modeling lessons. This includes organizing principles about mathematical modeling, steps for the modeling process, and how to assess students' work. It emphasizes that modeling is a collaborative activity with room for interpretation.
- The materials use a variety of warm-up approaches, such as "Math Talk" in "Unit 5, Lesson 3," "Notice and Wonder" in "Unit 5, Lesson 9," and "Which One Doesn't Belong?" in "Unit 5, Lesson 11." Each warm-up includes guidance on the purpose and delivery of the activity and provides recommendations for student seating and discussion.

Materials support multiple types of practice (e.g., guided, independent, collaborative) and include guidance for teachers and recommended structures (e.g., whole group, small group, individual) to support effective implementation.

- The materials support multiple types of practice. For example, in the "Course Overview: Teacher Guide: Supporting Diverse Learners: Mathematical Language Development and Access for English Learners," students collect examples of words with the suffix "-ion" over 24 hours, fostering independent practice. Students also work in groups to relate words to their Latin roots, which promotes collaborative practice.
- The materials include guidance for teachers to support effective implementation. The "Course Overview: Teacher Guide" outlines how to use the "Launch - Work - Synthesize" framework effectively. During the "Launch," teachers ensure students understand the context and problem. During "Student Work Time," students work individually, with a partner, or in small groups. During "Activity Synthesis," teachers help students synthesize what they have learned.
- The materials include recommended structures to support effective implementation. In "Unit 4 Teacher Guide: 1.2 Matching Descriptions and Graphs," students work in pairs to match descriptions with graphs and explain their reasoning. The "Unit 6 Teacher Guide" also recommends arranging students in groups of two to four for discussion and problem-solving.
- The materials provide varied instructional approaches within lessons. For example, "Unit 4 Lesson 8" includes a "Notice and Wonder" warm-up that encourages discussion, a

collaborative activity synthesis to interpret graphs, and an individual cool-down where students draw graphs. This structure supports a balanced approach to guided, collaborative, and independent practice.

Supports for All Learners

3.3	Supports for Emergent Bilingual Students	0/11
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.	**0/2**
3.3b	Materials include implementation guidance to support teachers in effectively using the materials in state-approved bilingual/ESL programs.	**0/1**
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.	**0/8**
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 do not 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 do not include implementation guidance to support teachers in effectively using the materials in state-approved bilingual/ESL programs. Materials do not 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 do not include teacher guidance on providing linguistic accommodations for various levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], designed to engage students in using increasingly more academic language. Limited guidance is provided in the "Course Overview: Teacher Guide: Supporting Diverse Learners: Mathematical Language Development and Access for English Learners." This guidance, adapted from work by Understanding Language at Stanford University, is found in Appendix D. For example, on Page 41, it states, "The activity apprentices students into the type of close reading needed to understand more complex math problems and math texts."
- The materials do not specify accommodations for different levels of language proficiency as defined by the ELPS. General guidance is provided in the "Course Overview: Teacher Guide: Supporting Diverse Learners: Mathematical Language Development and Access for English Learners," Appendix D, Page 47, which provides a task for students to solve a problem and

then explain their solution using targeted vocabulary. This task alerts students to important vocabulary and terms during a contextualized mathematics activity.

- The materials do not include specific guidance on providing linguistic accommodations for various proficiency levels. The "Teacher Guide: Supporting Diverse Learners" mentions supporting linguistically and culturally diverse students, stating, "These materials include embedded instructional routines and practices aimed to support instruction that meets the needs of linguistically and culturally diverse students who are learning mathematics while simultaneously acquiring English," but this does not fulfill the requirements for linguistic accommodations as defined by the ELPS.
- The materials reference an external website, "Supporting ELLs in Mathematics | Understanding Language from Stanford University," for additional support for English learners. However, this does not meet the criteria for providing specific linguistic accommodations aligned with the ELPS, nor does it include detailed guidance within the materials.

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

- The materials do not include implementation guidance to support teachers in effectively using the materials in state-approved bilingual/ESL programs within the lessons. General guidance is provided in the "Course Overview: Teacher Guide: Supporting Diverse Learners: Mathematical Language Development and Access for English Learners," adapted with permission from Stanford University. However, this does not meet the specific needs for state-approved programs.
- The materials do not include specific guidance for using the materials in state-approved bilingual/ESL programs, despite mentioning support for linguistically and culturally diverse students. The "Course Overview: Teacher Guide" states, "These materials include embedded instructional routines and practices aimed to support instruction that meets the needs of linguistically and culturally diverse students who are learning mathematics while simultaneously acquiring English," but does not provide detailed implementation instructions.
- The materials do not include targeted guidance for state-approved bilingual/ESL programs. The provided link to Stanford University's resources offers general advice on using math tasks to support language development but does not align with the specific requirements of state-approved bilingual/ESL programs.
- The materials do not provide a tailored framework for state-approved bilingual/ESL programs. The generic approach is not aligned with the ELPS and does not provide the necessary support for effective implementation in these 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.

- The materials do not include embedded guidance for teachers to support emergent bilingual students in developing academic vocabulary through oral discourse in the lessons. General

guidance is provided in the "Course Overview: Teacher Guide: Supporting Diverse Learners: Mathematical Language Development and Access for English Learners," stating that these materials include embedded instructional routines and practices to support linguistically and culturally diverse students, but the guidance is not embedded.

- The materials do not include embedded guidance for teachers to support emergent bilingual students in developing academic vocabulary through written discourse. The "Course Overview: Teacher Guide: How to Use These Materials" mentions that this curriculum builds on foundational principles for supporting language development for all students but does not provide specific embedded guidance for written discourse.
- The materials do not include embedded guidance for teachers to support emergent bilingual students in increasing comprehension through oral and written discourse. The "Course Overview: Teacher Guide" mentions principles like "Cultivate Conversation" to strengthen opportunities for mathematical discussions, there is no specific embedded guidance to support increasing comprehension through oral and written discourse.
- The materials do not include embedded guidance for teachers to support emergent bilingual students in building background knowledge and making cross-linguistic connections through oral and written discourse. There is an additional document titled "Supporting ELLs in Mathematics CCSS-aligned Mathematics Tasks with Annotations and Other Resources," which provides some general strategies it does not provide specific embedded guidance within the lessons for these areas.

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

- The materials do not include implementation guidance to support teachers in effectively using the materials with emergent bilingual students. General guidance is provided in the "Course Overview: Teacher Guide: Supporting Diverse Learners: Mathematical Language Development and Access for English Learners," adapted with permission from Stanford University.
- The materials do not include embedded guidance for teachers to support emergent bilingual students. While the "Course Overview: Teacher Guide" mentions principles like "Cultivate Conversation" to strengthen opportunities for mathematical discussions, there is no specific embedded guidance to support increasing comprehension through oral and written discourse.
- The general guidance is not strong for supporting emergent bilingual students. It is provided in the "Course Overview: Teacher Guide: Supporting Diverse Learners: Mathematical Language Development and Access for English Learners," Appendix D, Page 47. This task requires students to solve a problem and then explain their solution using targeted vocabulary. This task alerts students to important vocabulary and terms during a contextualized mathematics activity. There are no other supports provided for this task.

Depth and Coherence of Key Concepts

4.1	Depth of Key Concepts	1/3
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.	**0/2**

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. Practice opportunities are not aligned to the TEKS. Materials do not include questions and tasks that 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.

- Practice opportunities require students to demonstrate depth of understanding aligned to the TEKS. For example, "Unit 5, Lesson 3.3: Cool-down - Use Your Powers!" and "Unit 4, Lesson 3.2, Question 2," requires students to apply exponent rules and evaluate functions respectively.

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

- The materials include various below grade-level questions and tasks. For instance, in "Unit 1, Lesson 1.1," the warm-up activity focuses on mental subtraction strategies intended to develop fluency for computing the interquartile range, which does not align with grade-level rigor.
- In the materials titled "Unit 1, Lesson 1.2," students recall prior knowledge about the five-number summary and construct box plots. This activity aims to reinforce understanding, but it does not introduce progressively more complex questions that increase the rigor.
- The online cool-down activity in Unit 1 further highlights the absence of progression. In this activity, students are tasked with calculating the five-number summary, which includes the minimum, maximum, quartile 1, median, and quartile 3. This task reinforces previously learned concepts but does not introduce new, more complex problems or build on students' understanding.
- In Unit 4, the online lessons do not demonstrate increased rigor and complexity. "Lesson 7.1" involves simplifying fractions, which is a fifth-grade level task. Following this, "Lesson 7.2" asks students to find the slope between two points, and "Lesson 7.3" has them find the slope

from a graph. These activities do not progressively build on the same standard, and the level of rigor remains the same throughout.

Depth and Coherence of Key Concepts

4.2	Coherence of Key Concepts	4/12
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.	**0/3**
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.	**0/3**
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.	**2/4**

The materials demonstrate coherence across course and grade bands through a logically sequenced and connected scope and sequence. Materials do not demonstrate coherence across units by explicitly connecting patterns, big ideas, and relationships between mathematical concepts. Materials do not demonstrate coherence across units by connecting the content and language learned in previous courses and grade levels and what will be learned in future courses and grade levels to the content to be learned in the current course and grade level. Materials demonstrate coherence at the lesson level by connecting students' prior knowledge of concepts and procedures from prior grade levels to new mathematical knowledge and skills. Materials do not demonstrate coherence at the lesson level by connecting students' prior knowledge of concepts and procedures from the current grade level 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 materials demonstrate coherence across course/grade bands through a logically sequenced scope and sequence in the teacher-facing "Course Overview: Course Guide: Lessons By Standard." For example, "Extra Support Materials for Algebra 1.2.16" includes standards progression from grade 7 through high school.
- The materials demonstrate coherence across course/grade bands through a connected scope and sequence in the teacher-facing "Course Overview: Course Guide: Lessons By Standard." For instance, "Extra Support Materials for Algebra 1.2.19" connects standards from grade 6 to high school.
- The materials demonstrate coherence across courses and grade bands through a connected and logically sequenced scope and sequence. The "Course Guide" includes a "Pacing Guide" that links Algebra 1, geometry, and Algebra 2 lessons and assessments. The dependency chart states, "An arrow indicates that a particular unit is designed for students who already know the material in a previous unit. Reversing the order would have a negative effect on mathematical or pedagogical coherence."

- The materials include a scope and sequence that demonstrates a logical progression of ideas, found in the "Course Guide" subsection "Scope and Sequence." This section also includes a dependency diagram to show the preferred order of lessons and the progression for Geometry and Algebra 2, aiding teachers in solidifying the progression of ideas.

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

- The materials do not demonstrate coherence across units by explicitly connecting patterns between mathematical concepts. For example, in "Unit 1: Lesson 1: Human Box Plot," the lesson recalls the five-number summary and constructing box plots from earlier grades but does not connect patterns across different units.
- The materials demonstrate coherence within lessons but not across units. For instance, in "Unit 15: Lesson Narrative," students interpret distributions and match them to situations, using data distribution shapes to inform decisions. However, this coherence is not explicitly connected to other units.
- The materials do not demonstrate coherence across units by explicitly connecting big ideas between mathematical concepts. For instance, "The Course Overview: Course Guide: Scope and Sequence: Dependency Diagram" indicates unit dependencies, such as from G.3 to G.4 for understanding trigonometric ratios and from A1.5 to A1.6 for contrasting quadratic and exponential functions, but coherence within units is not explicit.
- The materials connect learning from previous grades and associated Algebra 1 lessons but do not show coherence across units. For example, "Lesson 1: Expressing Mathematics" reviews operations and expressions with variables, connecting to grade 6 work and preparing students for Algebra 1 lessons, but does not establish explicit connections across different units.

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 do not demonstrate coherence across units by connecting the content learned in previous courses/grade levels to the content to be learned in the current course/grade level. In the "Teacher Guide: How to Use These Materials," the publisher states that extension problems are available under "Are You Ready for More?" to deepen grade-level mathematics and involve prior grades' work, but these are not present in the product.
- The materials do not demonstrate coherence across units by connecting the language learned in previous courses/grade levels to the content to be learned in the current course/grade level. For example, in "Algebra 1 Supports: Unit 2: Lesson 4: Solutions in Context," the warm-up activity refers to using precise language to describe equations but does not connect this language across units.
- The materials do not demonstrate coherence across units by connecting what will be learned in future courses/grade levels to the content to be learned in the current course/grade level. For instance, in "Unit 7: Quadratic Situations," the teacher preparation lesson narrative

mentions solving systems of equations involving a quadratic equation but only in the context of the associated Algebra 1 lesson.

- The materials connect content learned in previous grade levels but do not demonstrate coherence across units. For instance, in "Unit 2, Lesson 3: Setting the Table," the lesson narrative helps students recall relationships across tables, situations, and equations, preparing them for the associated Algebra 1 lesson. However, it does not provide a coherent connection across different units.
- The materials do not demonstrate coherence across units by connecting what will be learned in future courses/grade levels to the content to be learned in the current course/grade level. For instance, in "Unit 7: Quadratic Situations", the teacher preparation lesson narrative mentions solving systems of equations involving a quadratic equation but only in the context of the associated Algebra 1 lesson.
- The materials connect content learned in previous grade levels but do not demonstrate coherence across units. For instance, in "Unit 2, Lesson 3: Setting the Table", the lesson narrative helps students recall relationships across tables, situations, and equations, preparing them for the associated Algebra 1 lesson. However, it does not provide a coherent connection across different units.

Materials demonstrate coherence at the lesson level by connecting students' prior knowledge of concepts and procedures from the current and prior grade level(s) to new mathematical knowledge and skills.

- The materials demonstrate coherence at the lesson level by connecting students' prior knowledge of concepts from prior grade levels to new mathematical knowledge and skills. For example, in "Unit 2, Lesson 1: Expressing Mathematics," students review operations and expressions with variables, building on their grade 6 work of using variables to represent numbers and solve problems. This prepares students for Algebra 1 by helping them think through verbal descriptions and connect them to expressions.
- The materials demonstrate coherence by connecting students' prior knowledge of procedures from earlier grades to new mathematical knowledge and skills. For instance, in "Unit 2, Lesson 3: Setting the Table," students recall relationships across tables, situations, and equations, helping them prepare for Algebra 1 lessons by relating situations and tables to linear equations in slope-intercept form and standard form.
- The materials do not demonstrate consistent coherence in connecting prior knowledge to the current unit. For instance, the "Teacher Guide: How to Use These Materials" states, "The first event in every lesson is a warm-up. A warm-up either helps students get ready for the day's lesson or allows students to strengthen their number sense or procedural fluency." These warm-ups do not explicitly connect current grade-level knowledge to new material.
- The materials do not demonstrate coherence at the lesson level by connecting students' prior knowledge of procedures from the current grade level to new mathematical knowledge and skills. For example, in "Unit 2, Lesson 25: Representing Systems of Inequalities," teachers are directed to have students reflect on prior constraints studied. However, this does not explicitly connect to current grade-level knowledge and skills.

Depth and Coherence of Key Concepts

4.3	Spaced and Interleaved Practice	4/8
4.3a	Materials provide spaced retrieval opportunities with previously learned skills and concepts across lessons and units.	**2/4**
4.3b	Materials provide interleaved practice opportunities with previously learned skills and concepts across lessons and units.	**2/4**

The materials provide spaced retrieval opportunities with previously learned skills and concepts across lessons and units. Materials do not provide spaced retrieval opportunities with previously learned skills and concepts across units. Materials provide interleaved practice opportunities with previously learned skills and concepts across lessons. Materials do not provide interleaved practice opportunities with previously learned skills and concepts across lessons.

Evidence includes, but is not limited to:

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

- The materials provide spaced retrieval opportunities with previously learned skills across lessons in Unit 1. For example, in "Unit 1, Lesson 4: The Shape of Data Distributions," the activity requires students to analyze distribution shapes and their descriptions, which prepares them for a later lesson on data displays. This reinforces the importance of distribution shapes and their implications. These same retrieval opportunities do not occur across units.
- The materials offer spaced retrieval opportunities with previously learned skills in every lesson through cool-down activities that serve as formative assessments. For example, in "Unit 5, Lesson 3.3: Cool-down - Use Your Powers!" students apply exponent rules to evaluate expressions or write them with fewer terms.
- The materials do not provide spaced retrieval opportunities with previously learned skills and concepts across units. The *Teacher Guide* contains narratives describing the mathematical content and its place in the learning sequence. They do not incorporate spaced retrieval of previously learned skills and concepts from other units.

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

- The materials provide interleaved practice opportunities with previously learned skills and concepts across lessons. For example, in "Unit 2, Lesson 26.3: Cool-down - Error!" the activity synthesis emphasizes reasoning through solving inequalities, practicing error analysis, and spotting mistakes when solving equations and inequalities. This cool-down integrates 8th-grade equations and Algebra concepts using the distributive property.

- The materials provide interleaved practice opportunities in the "Unit 1, Lesson 2: Human Dot Plot" activity; students create dot plots from collected class data, collaborate with partners, and discuss strategies for expressing typical values (mean or median). This activity helps students analyze data in later lessons and practice data collection and graphical representation skills used throughout the unit.
- The materials do not provide interleaved practice opportunities with previously learned skills across units. For instance, in "Unit 1, Lesson 1: Human Box Plot," the lesson narrative connects to prior work in earlier grades and Algebra but does not demonstrate interleaved practice across different units.
- The materials do not provide interleaved practice with specific connections to other units. For example, in the "Unit 1, Lesson 3: Best Representation" activity, students practice constructing box plots, dot plots, and histograms, but the materials do not reference connections to other units.

Balance of Conceptual and Procedural Understanding

5.1	Development of Conceptual Understanding	17/18
5.1a	Questions and tasks require students to interpret, analyze, and evaluate a variety of models and representations for mathematical concepts and situations.	**11/12**
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 and analyze a variety of models and representations for mathematical concepts and situations. Questions and tasks do not require students to 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 contain tasks but not questions that require students to evaluate a variety of models and representations for mathematical concepts and situations. For example, in "Unit 3, Lesson 6," students interpret data and predictions using a linear model represented through equations, graphs, and tables. The lesson includes discussion questions such as, "How can you use the graph to complete the estimated amount spent on gas?"
- Questions and tasks in the materials require students to analyze a variety of models for mathematical concepts and situations. For example, in "Unit 6, Lesson 7," students analyze multiple graphs to determine which best represents a given situation. Students also analyze graphs showing the fine for an overdue book at the library, determining which graph accurately represents the relationship between time and the fine.
- Tasks in the materials require students to evaluate a variety of models for mathematical concepts and situations. For example, in "Unit 6, Lesson 12," students use graphing technology to evaluate expressions by altering constants and coefficients in the equation y = x. This activity helps students understand the impact of changing variables on the graph and evaluate different mathematical models.
- The materials do not include questions that require students to evaluate a variety of representations for mathematical concepts and situations. For instance, in "Unit 1 Lesson 12.2: The Better Option," students review data and select the best option based on measures of center and variability, but the materials do not explicitly require them to evaluate different types of representations to make their decision.

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

- The materials include questions and tasks that require students to create a variety of models to represent mathematical situations. For example, in "Unit 1: Lesson 1: Human Box Plot: 1.2," students write down their shoe size and then create a human box plot by positioning themselves on a number line according to their number. This activity involves calculating the five-number summary (minimum, maximum, median, first quartile, and third quartile) and visually demonstrating these concepts, helping students understand and create box plots through a hands-on approach using real-world data.
- The materials include tasks that require students to create a variety of models to represent mathematical situations. For instance, in "Unit 5: Lesson 14, 14.1: Warm-up - Visualizing Percent Change," students match situations to diagrams and draw diagrams to represent given situations, expressing percentage changes with multiplication. Additionally, in "Unit 5, Lesson 16, 16.1: Warm-up - The Phone for the Lowest Price," students explain their reasoning using models, such as diagrams, to determine which phone sale has the lowest price.

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

- The materials include questions and tasks that provide opportunities for students to apply conceptual understanding to new problem situations. For example, in "Unit 1: Lesson 1: Human Box Plot," students create a box plot based on their shoe sizes and calculate the five-number summary. They then apply this understanding to new data sets such as the height of plants, the age of dancers at a dance camp, and points scored in basketball. Each group drafts a box plot and creates a visual to share with peers, answering questions to ensure the range and summary make sense for each new context.
- The materials include tasks that engage students in applying their conceptual understanding to new contexts. For example, in "Unit 3: Lesson 8: Correlations," students explore different types of relationships between variables. The lesson narrative states that students interpret scatter plots to understand positive and negative correlations, preparing them to interpret correlation coefficients in Algebra 1. Activities encourage students to reason abstractly and quantitatively as they analyze relationships in scatter plots, discussing how variables might be related.
- Tasks in the materials require students to use their conceptual understanding in varied situations. In "Unit 6: Lesson 12: Changing the Equation," students evaluate expressions using graphing technology. They analyze how changing constants and coefficients in the equation y=x affects the graph. This activity helps students apply their understanding of algebraic expressions and their transformations to new mathematical problems and contexts.

Balance of Conceptual and Procedural Understanding

5.2	Development of Fluency	8/12
5.2a	Materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level tasks.	**1/2**
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.	**3/6**
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 fluency necessary to complete grade-level tasks. Materials do not provide tasks that are designed to build student automaticity 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. Materials do not provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy 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.

- The materials provide tasks that build student fluency necessary for completing grade-level tasks. For example, in "Unit 3: Lesson 2: 2.1: Warm-up - Math Talk: Percents," students engage in activities to find percentages of numbers. Tasks like evaluating 50% of 200 and 25% of 200 help students develop fluency with percentages, which is crucial for later lessons where this skill is applied.
- The materials include tasks designed to build fluency, as seen in "Unit 4, Lesson 11: Exploring Domains and Ranges." Tasks are designed to build fluency in understanding domain and range. Activities include discussing the domain and range of functions from graphs and identifying values that fall within these ranges. This approach helps students develop a deeper understanding of functions, enhancing their fluency in handling related grade-level tasks.
- The materials do not explicitly address building student automaticity. For instance, "Unit 5: Lesson 3: 3.1: Warm-up - Math Talk: Comparing Expressions" helps students develop fluency with expressions involving exponents. However, there is no specific evidence of tasks designed to build automaticity in solving such expressions quickly and accurately.

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

- The materials provide opportunities for students to practice the application of efficient mathematical procedures within the lessons. For example, in "Unit 2: Lesson 24: Reasoning with Graphs of Inequalities," students generalize strategies for solving two-number riddles and connect them to inequalities. They use efficient strategies such as guessing values, checking them for conditions, and rewriting verbal descriptions into equations or inequalities, and then evaluate the efficiency of these methods through teacher-guided discussions.
- The materials emphasize the practice of flexible mathematical procedures within the lessons. For example, in "Unit 7: Lesson 8: A Method for Multiplying," students are introduced to different strategies for solving problems, such as using the distributive property to multiply 97 by 103. They break down the numbers as 100 – 3 and 100 + 3, respectively, and multiply them using the formula (100 − 3)(100 + 3). This flexible approach helps students understand and apply multiple methods to solve problems effectively.
- The materials provide integrated opportunities for practicing accurate mathematical procedures within the lessons. For example, in "Unit 7: Lesson 8," students use a table to multiply factors and verify their solutions. The teacher guides them to multiply values from the top row and left column, then sum the products to find the final answer. This methodical approach ensures accuracy and helps students develop precision in their mathematical calculations.
- The materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within individual lessons, but this practice is not extended throughout the unit. For example, in "Unit 4, Lesson 11: Exploring Domains and Ranges," the warm-up activity prompts students to discuss the range of a function using a graph, but this is not carried through the unit.

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

- The materials provide opportunities for students to evaluate procedures for efficiency within the lesson and unit. For instance, in "Unit 7: Lesson 8: A Method for Multiplying," students engage in a new method of multiplying factors using a table. Each value in the table is found by multiplying the values in the top row and left column. By adding all the values in the middle of the table, students find a solution and discuss the efficiency of this method.
- The materials emphasize the evaluation of flexible strategies. For example, in "Unit 2: Lesson 24: Reasoning with Graphs of Inequalities," students generalize their strategy for solving two-number riddles and connect them to inequalities. They use multiple techniques, such as guessing values and rewriting verbal descriptions into equations or inequalities. The teacher facilitates a discussion to evaluate which strategies are more flexible and whether different strategies arrive at the same answer efficiently.
- Opportunities for evaluating accuracy are integrated into the materials. For example, in "Unit 5: Lesson 19: Adjusting Windows," students use graphing technology to create graphs and adjust graphing windows to match displayed graphs. They evaluate the accuracy of different

graphing windows by considering various scenarios, such as convincing others about the significance of a model. This activity helps students understand how to accurately represent data and efficiently adjust their methods.

- The materials encourage students to critique and improve their processes for solving equations. For example, in "Unit 7: Lesson 5: Steps in Solving Equations," students practice recognizing common errors and rewriting equations into different forms. Activities such as "Warm-up - Explaining Equivalent Expressions" and "Checking Work" allow students to identify mistakes, explain their reasoning, and discuss the efficiency and accuracy of their solutions with peers. This collaborative critique helps students refine their problem-solving approaches for better accuracy and efficiency.

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

- The materials contain embedded supports for teachers to guide students toward increasingly efficient approaches. Each unit and lesson includes links in the right windowpane to various tools, such as a four-function calculator, a scientific calculator, a graphing calculator, a geometry calculator, a calculation spreadsheet, a probability calculator, and geometric constructions. These tools provide both students and teachers with resources to select the most efficient method for solving mathematical problems, enhancing the learning experience.
- The online teacher version includes specific guidance to help teachers direct students toward efficient methods. For example, in "Unit 2: Lesson 26.2," the lesson narrative states, "The mathematical purpose of this lesson is to help students reason about why testing points is an important step in solving inequalities, and how to do so purposefully and efficiently." Later in the lesson, the teacher is prompted to address student frustration with computation by asking, "Andre is frustrated with how much computation he had to do. What advice would you give him about how many numbers to test and which ones to test?" This guidance helps students learn to use more efficient methods when solving inequalities.

Balance of Conceptual and Procedural Understanding

5.3	Balance of Conceptual Understanding and Procedural Fluency	8/16
5.3a	Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed.	**0/2**
5.3b	Questions and tasks include the use of concrete models and manipulatives, pictorial representation (figures/drawings), and abstract representations.	**4/6**
5.3c	Materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numeric/algorithmic) concepts.	**4/8**

The materials do not explicitly state how the conceptual and procedural emphasis of the TEKS are addressed. Questions and tasks include the use of pictorial representations (figures/drawings) and abstract representations. Questions and tasks do not include the use of concrete models and manipulatives. Materials include supports for students in connecting, creating, defining, and explaining representational models to abstract (symbolic/numeric/algorithmic) concepts. Materials do not include supports for students in connecting, creating, defining, and explaining concrete 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.

- The materials do not explicitly state how the TEKS' conceptual or procedural emphasis is addressed. For instance, in "Unit 1: Lesson 15: Where Are We Eating?" the materials do not reference any TEKS standards.
- The materials' Course Overview and Teacher Guide sections do not mention the TEKS. The materials state, "To learn more about the progression of modeling concepts through high school and beyond, see the Progressions for Common Core State Standards in Mathematics, High School Modeling."

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

- The materials include tasks that incorporate pictorial representations, such as in "Unit 5, Lesson 21: Skills for Mathematical Modeling" and "21.3: Let's Model Some Stuff." Students use a scatter plot and data set and decide whether a linear or exponential model would be a better fit. They then create a function to model the data and use it to predict future values, using visual representations to inform their choices.
- The materials include pictorial representations in tasks. For example, in 14.1: "Warm-up - Visualizing Percent Change," students observe and discuss percent bar graphs. The task involves matching each situation to a diagram and explaining their reasoning, fostering an understanding of percent change through visual models.

- The materials offer tasks that involve creating models using technology but do not explicitly include concrete models and manipulatives. For instance, in "Unit 5, Lesson 21: Holy Agave!" students use graphing technology to create scatter plots from data points. Graphing technology serves as a tool for visual representation and model creation but is not manipulative.
- The materials incorporate abstract representations in "Unit 6, Lesson 3: Lots of Rectangles: 3.1: Math Talk: Many Ways to Area," students are presented with a rectangle divided into parts with labeled expressions. They are tasked with explaining why each expression represents the area of the rectangle, matching figures with expressions, and understanding abstract concepts of the area through symbolic representations.
- The materials employ concrete ideas but do not offer manipulatives to help students grasp abstract concepts. The design principle of providing experience with new contexts before introducing abstract ideas is evident. For example, in "Unit 1: Lesson 1.1.2: Creating Expressions to Estimate Cost, Part 1," party planning is used as a concrete context to engage students and facilitate their understanding before moving to abstract representations.

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

- The materials do not include support for students in connecting concrete models to abstract concepts. For example, in "Unit 5, Lesson 21: Skills for Mathematical Modeling," students use graphing technology to create a scatter plot and determine whether a linear or exponential model is a better fit for the data. However, no concrete models, such as geometry boards or tangible objects, are provided to support the connection between concrete and abstract concepts.
- The materials do not offer support for students in creating concrete models to abstract concepts. In "Unit 5, Lesson 21," students create a function model using graphing technology and answer questions related to the data. While they engage in modeling, the lack of concrete materials means that students miss out on tangible experiences that could enhance their understanding of abstract mathematical concepts.
- The online curriculum provides support for students in connecting representational models to abstract concepts. In "Unit 6, Lesson 3: Lots of Rectangles," students work with abstract representations of area. For instance, they match figures with expressions representing their area, such as (n + n)(n + n + n). This helps students understand the relationship between visual models and abstract mathematical expressions.
- The materials include support for students in defining and explaining representational models to abstract concepts. For example, in "Unit 6, Lesson 15: Preparing for Vertex Form," students analyze graphs of linear and quadratic functions to determine which one does not belong. They then graph equations and complete tables to define changes in the graphs. This process helps students articulate their understanding of how different representations relate to abstract mathematical concepts.

Balance of Conceptual and Procedural Understanding

5.4	Development of Academic Mathematical Language	10/14
5.4a	Materials provide opportunities for students to develop their academic mathematical language using visuals, manipulatives, and other language development strategies.	**2/3**
5.4b	Materials include embedded guidance for the teacher addressing scaffolding and supporting student development and use of academic mathematical vocabulary in context.	**1/2**
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.	**7/9**

The materials provide opportunities for students to develop their academic mathematical language using visuals, manipulatives, and other language development strategies. Materials do not provide opportunities for students to develop their academic mathematical language using manipulatives. Materials include embedded guidance for the teacher to support student development and use of academic mathematical vocabulary in context. Materials do not include embedded guidance for the teacher addressing scaffolding 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. Materials do not 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 materials provide opportunities for students to develop their academic mathematical language using visuals. For example, in "Unit 7: Lesson 7.10," students coordinate (orally and in writing) a quadratic expression given in factored form with the intercepts of its graph and interpret the meaning of x-intercepts and y-intercepts on a graph of a quadratic function that represents a context. Additionally, "Graphs of Functions in Standard and Factored Forms: 7.10.2: Quadratic Forms and Their Graphs Activity" includes a visual of a man throwing a ball in the air. Students analyze the graph and explain how the numbers in the factored form of a quadratic expression relate to the intercepts of its graph.
- The materials provide opportunities for students to develop their academic mathematical language using technology. For example, in "Lesson 8.12: Using Technology to Find the Quadratic Regression," the "Warm Up" Activity includes an embedded activity using the Desmos graphing tool. Students enter data and examine the data for a pattern that might fit

any quadratic function they recognize, developing language with terms such as "curve of best fit" and "quadratic regression."

- The materials provide opportunities for students to develop their academic mathematical language using other language development strategies. For example, in "Unit 8: Project 8 Teacher Guide: Modeling Rocket Flight," the "Learning Goals" include explaining why quadratic equations can have no solutions and recognizing that the number of solutions to a quadratic equation can be revealed when the equation is written as an expression in factored form equal to zero. Students use visual aids such as graphs to define specific functions given their zeros and a point.
- The materials emphasize student explanations to develop academic mathematical language. For example, "Unit 7: Lesson 7.10, Learning Targets (Student Facing)" requires students to explain the meaning of intercepts on a graph of a quadratic function in terms of the situation it represents and how the numbers in the factored form of a quadratic expression relate to the intercepts of its graph. This task integrates oral and written explanations to reinforce language development.
- The materials do not provide opportunities for students to develop their academic mathematical language using manipulatives. For instance, in "Unit 8: Lesson 8.8: Rewriting Quadratic Expressions in Factored Form, Part 3," students use a diagram to solve the expanded product of the difference of two squares. This activity helps students develop their academic language related to quadratic expressions, linear terms, and the difference of squares.

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

- The materials include embedded guidance for the teacher to support the application of academic mathematical language in context. For instance, in "Unit 4, Lesson 8," the "Warm Up" activity prompts students to describe information from graphs, helping them articulate observations with precise language.
- The materials include supports for developing academic vocabulary through specific activities. In "Unit 1, Lesson 4," teachers are directed to discuss vocabulary such as bell-shaped, symmetric, and skewed during the "Activity Synthesis," highlighting the meanings of these terms and their relevance to data distribution shapes.
- The materials include guidance for mathematical conversations that refine and use math language. In "Unit 5, Lesson 21," during the Warm-up, "Which One Doesn't Belong: Lists," students analyze lists of numbers and discuss their reasoning in small groups, which helps them use and refine terminology related to linear and exponential changes.
- The materials include vocabulary support but do not contain explicit scaffolding for vocabulary development. For example, in "Unit 2, Lesson 7.2," students are reminded of the concept of equivalent equations, but there is no structured scaffolding activity to support the gradual development of vocabulary understanding.

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 materials include embedded guidance for the teacher to support the application of appropriate mathematical language, providing opportunities for students to hear math language with peers. For example, in "Unit 7: Lesson 12: 12.2: Matching Perfect Squares," students work in pairs to discuss and agree on equivalent expressions, allowing them to listen to and understand mathematical terminology.
- The materials include embedded guidance for the teacher to support the application of appropriate mathematical language, providing opportunities for students to refine math language with peers. In "Unit 7: Lesson 18: 18.1: Warm-up - Math Talk: Operations with Roots," teachers are prompted to ask students to restate reasoning in different ways, discuss alternate strategies, and build on each other's ideas, fostering the refinement of mathematical language.
- The materials include embedded guidance for the teacher to support the application of appropriate mathematical language, providing opportunities for students to use math language with peers. "In Unit 1: Lesson 3: 3.2 Best Representation," students share their preferred data representations and explanations in groups, discussing different insights and challenges, which encourages the use of precise mathematical language.
- The materials include embedded guidance for the teacher to support the application of appropriate mathematical language, providing opportunities for students to develop their math language toolkit over time. In "Unit 1: Lesson 3: 3.3 Which One?" students practice interpreting data by agreeing or disagreeing with statements about data displays, gradually building their mathematical vocabulary and understanding through repeated practice.
- The materials do not include embedded guidance for the teacher to support student responses using exemplar responses to questions or tasks. For example, in "Unit 1: Lesson 10: Activity Synthesis," teachers are directed to ask students to share their estimates and reasoning, but no exemplar responses are provided for reference.

Balance of Conceptual and Procedural Understanding

5.5	Process Standards Connections	1/6
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.	**0/2**
5.5c	Materials include a description for each unit of how process standards are incorporated and connected throughout the unit.	**0/2**
5.5d	Materials include an overview of the process standards incorporated into each lesson.	**0/1**

Process standards that are integrated appropriately into the materials. Materials do not include a description of how process standards are incorporated and connected throughout the course. Materials do not include a description for each unit of how process standards are incorporated and connected throughout the unit. Materials do not 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 integrated appropriately into the materials. In the resource folder, the document "Formative Assessments - TX TEKS_IM Algebra I Extra Support Materials Powered by Kiddom" defines the process standards for the Algebra I Support course.
- For instance, "Unit 2, Lesson 1: Expressing Mathematics" addresses reasoning abstractly and quantitatively.

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

- The materials do not include a description for each unit of how process standards are incorporated and connected throughout the course. For example, in the "Unit 1 Teacher Guide," page 2 is blank.
- The materials include a description of how math practices are incorporated throughout the course, but do not include a description of how process standards are incorporated and connected throughout the course. For example, "Unit 2, Lesson 3: Setting the Table" includes a lesson narrative that explains the mathematical purpose of the lesson and references "MP7" (making use of structure) but does not describe how process standards are incorporated.
- The materials include a separate "Process Standards Integration Document: 9–12 TEKS," which includes a generic description, but that does not provide a detail how process standards are incorporated and connected throughout each unit.

- In the online teacher version, there is a "Lessons By Standard" section that addresses standards alignment without mention of process standards.

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

- The materials do not include a description for each unit of how process standards are incorporated and connected throughout the unit, as evidenced by the blank page in the "Unit 1 Teacher Guide," page 2. Instead, the materials provide a teacher-facing lesson narrative, such as in "Unit 1: Lesson 10," which explains the mathematical purpose of the lesson and references standards other than process standards (6.SP.B.5.d, 5.NF.A.2, HSS-ID.A.3). In "Unit 2, Lesson 3: Setting the Table," the lesson narrative explains the mathematical purpose of the lesson and references "MP7" (making use of structure) but does not describe how the process standards are incorporated.
- In the online teacher version, there is a "Lessons By Standard" section that addresses standards alignment but does not mention process standards.

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

- In the materials, materials do not include an overview of the process standards incorporated into each lesson. The "Course Overview" in the *Teacher Guide* includes a section titled "Design Principles," which notes three kinds of standards alignments: "building on" prior grade work, "building towards" grade-level standards, and "addressing" grade-level tasks.
- The materials provide a description of how math practices are incorporated throughout the lessons /. For example, in "Unit 4, Lesson 1: Describing Graphs," the lesson narrative states that students practice understanding graphs in situations by matching descriptions to graphs and then writing their own descriptions. It mentions constructing viable arguments and critiquing reasoning ("MP3") and reasoning abstractly and quantitatively ("MP2") but does not provide an overview of how the process standards are incorporated into each lesson.

Productive Struggle

6.1	Student Self-Efficacy	13/15
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.	**4/6**
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 and explaining that there can be multiple ways to solve problems and complete tasks. Materials do not support students in 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 provide opportunities for students to think mathematically. For example, in "Unit 4: Lesson 3," students compare four representations using precise math language, share their reasoning in small groups, and explain terminology such as function, input, and output during class discussions. Additionally, in "Unit 2: Lesson 11.1: Warm-up - Notice and Wonder: Sugar and Flour," students articulate their observations about graphs, discuss points on, above, and below the graph, and describe the context using precise language. This combination of activities ensures students consistently engage in thinking mathematically.
- The materials provide opportunities for students to persevere through solving problems. For example, in "Unit 2: Lesson 2 Words and Symbols," teachers are prompted to ask students to share their strategies for evaluating percentages, involve more students in the conversation, and use visual aids like double number lines to help students struggling with conceptual understanding. Additionally, the "Course Overview, Teacher Guide" emphasizes a problem-based curriculum that encourages students to develop strategies for tackling non-routine problems and engage in productive struggle, encouraging a mindset of perseverance.
- The materials provide opportunities for students to make sense of mathematics. For instance, in "Unit 2: Lesson 2, Math Talk: Perceiving Percents," students practice identifying and representing pertinent information in a word problem about purchasing t-shirts and shorts, discuss the important values and variables, and identify key information during a class discussion. Similarly, in "Unit 2: Lesson 11.2: Matching," students take turns describing graphs, matching graphs with equations, and explaining their reasoning to partners,

developing a deeper understanding of how equations and graphs represent the same relationships.

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

- The materials support students in explaining that there can be multiple ways to solve problems and complete tasks. For example, in "Unit 2: Lesson 3: Setting the Table," students practice using equations to complete tables and explore solving equations by substituting values. Teachers prompt students to think about rearranging equations for easier problem-solving and explain different methods for finding solutions.
- The materials do not support students in justifying that there can be multiple ways to solve problems and complete tasks. For example, in "Unit 2: Lesson 4: Solutions in Context," the "Row Game" activity has students represent situations symbolically, find and interpret solutions, and compare answers with partners. This activity encourages students to use various strategies, such as calculating specific values, analyzing quantities and relationships, and using mathematical structures to check their thinking and justify their answers.
- The materials support students in understanding that there can be multiple ways to solve problems and complete tasks. For example, in "Unit 5: Lesson 3.2: Reviewing the Properties of Exponents," students explore the properties of exponents by looking for patterns and rewriting expressions using exponent rules. The subsequent "Cool-down" activity allows students to apply these rules and evaluate expressions in different ways.

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

- The materials are designed to require students to make sense of mathematics through doing math with peers and with teachers. For example, in "Unit 2: Lesson 4: Solutions in Context," the "Row Game" activity has students practice representing situations symbolically, finding and interpreting solutions, and checking their thinking with partners. This activity requires students to apply various strategies, such as calculating specific values and analyzing quantities and relationships.
- The materials are designed to require students to make sense of mathematics through writing about math with peers. For example, in "Unit 3: Lesson 4: Interpret This, Interpret That," students work individually or with a partner to complete an activity involving a linear model of the weight of an elevator and the number of people on the elevator. They find values, explain their reasoning, and answer questions about the slope and y-intercept of the graph.
- The materials are designed to require students to make sense of mathematics through discussing math with peers and teachers. For example, in "Unit 2: Lesson 12: Connecting Situations and Graphs," teacher-facing materials prompt teachers to elicit responses from students after examining two graphs simultaneously. Students share their observations and engage in discussions to articulate what they notice and wonder about the point of intersection and its meaning in the situation.

Productive Struggle

6.2	Facilitating Productive Struggle	8/10
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.	**2/4**

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 anticipated misconceptions. Materials do not offer prompts and guidance to assist teachers in providing explanatory feedback based on student responses.

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.

- The materials support teachers in guiding students to share and reflect on their problem-solving approaches, including explanations. For example, in "Unit 2: Lesson 12: Connecting Situations and Graphs," the "Activity Synthesis" prompts teachers to guide students to develop the idea that graphs can be used to answer questions about a situation represented by a system of equations. Teachers call on students to share their thinking and ask questions to clarify their understanding, such as what information they got from a graph and why only the first quadrant is shown.
- The materials support teachers in guiding students to share and reflect on their problem-solving approaches, including arguments. For example, in "Unit 2: Lesson 12: Connecting Situations and Graphs: 12.2: Matching Graphs to Situations," teacher-facing materials prompt teachers to display graphs and have students match each pair to a situation, explaining their reasoning. The teacher records their reasoning and encourages students to respectfully disagree, ask for clarification, or point out contradicting information.
- The materials support teachers in guiding students to share and reflect on their problem-solving approaches, including justifications. In "Unit 1: Lesson 12: The Better Option," the "Activity Synthesis" prompts teachers to remind students of the importance of measures of variability. Students compare data sets, decide which option is better, and explain their reasoning using statistics to justify their answers.

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

- The materials do not offer prompts and guidance to assist teachers in providing explanatory feedback based on student responses. For example, in "Unit 2: Lesson 20: Interpreting

Inequalities: Activity: 20.3: Card Sort: What's the Situation?" the teacher-facing materials prompt teachers to engage students in sorting tasks and refining their descriptions using precise language and mathematical terms, there is no specific guidance on providing explanatory feedback. According to "Sandal and Sperle" (2024), feedback is a tool to promote students' learning and a central element in assessment for learning. "Shute" (2008) defines feedback as information provided to the learner to enhance and improve learning, which is not adequately addressed in this curriculum.

- The materials do not provide prompts and guidance for teachers to offer explanatory feedback based on student responses. For example, in "Unit 1: Lesson 16.2: Compare & Contrast: Launch," teachers are instructed to remind students to answer questions based on information from the box plots, but there is no guidance on how to address specific student responses or misconceptions, limiting the opportunity to provide meaningful feedback and support.
- The online teacher materials have sections called 'Anticipated Misconceptions' that offer guidance on addressing specific misunderstandings. For example, "Unit 1 Lesson 2.3" explains that students may confuse the dots representing the number of people who got a certain amount of sleep with the amount of sleep itself. It suggests labeling the number line as "hours of sleep" and reminding students of previous tasks to clarify that each dot represents a single student.
- The materials provide anticipated misconceptions, guiding teachers to address misconceptions. For example, "Unit 6: Lesson 7.1" notes that students might mistakenly think all lengths of a rectangle are possible without considering context. Teachers are prompted to ensure students understand that lengths like negative ten or zero are not valid and to discuss the domain of valid lengths, using inequalities to describe them.