

Publisher Name	Program Name
Curriculum Associates, LLC	<i>Texas i-Ready Classroom Mathematics</i>
Subject	Grade Level
Mathematics	4

Texas Essential Knowledge and Skills (TEKS) Coverage:	64.15%
English Language Proficiency Standards (ELPS) Coverage:	100%
<u>Quality Review Overall Score:</u>	191 / 227

Quality Review Summary

Rubric Section	Quality Rating
1. Intentional Instructional Design	41 / 53
2. Progress Monitoring	18 / 28
3. Supports for All Learners	31 / 32
4. Depth and Coherence of Key Concepts	21 / 23
5. Balance of Conceptual and Procedural Understanding	55 / 66
6. Productive Struggle	25 / 25

Strengths

- **1.2 Unit-Level Design:** Materials include comprehensive unit overviews that provide background content knowledge and academic vocabulary necessary for effective teaching, and contain supports for families in both Spanish and English with suggestions for supporting their student's progress.
- **3.1 Differentiation and Scaffolds:** Materials include teacher guidance for differentiated instruction, activities, and scaffolded lessons for students who have not yet reached proficiency, pre-teaching or embedded supports for unfamiliar

vocabulary and references in text, and guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skills.

- **3.2 Instructional Methods:** Materials include prompts and guidance to support teachers in modeling, explaining, and directly and explicitly communicating concepts to be learned. They provide teacher guidance and recommendations for effective lesson delivery using various instructional approaches, and support multiple types of practice with guidance on recommended structures, such as

whole group, small group, and individual settings, to ensure effective implementation.

- 4.2 Coherence of Key Concepts: Materials demonstrate coherence across courses and grade bands through a logically sequenced scope and sequence, explicitly connecting patterns, big ideas, and relationships between mathematical concepts, linking content and language across grade levels, and connecting students' prior knowledge to new mathematical knowledge and skills.
- 4.3 Spaced and Interleaved Practice: Materials provide spaced retrieval and interleaved practice opportunities with previously learned skills and concepts across lessons and units.
- 5.1 Development of Conceptual Understanding: Materials include questions and tasks that require students to interpret, analyze, and evaluate various models for mathematical concepts, create models to represent mathematical situations, and apply conceptual understanding to new problem situations and contexts.
- 5.4 Development of Academic Mathematical Language: Materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, and language strategies, with embedded teacher guidance on scaffolding vocabulary, syntax, and discourse, and supporting mathematical conversations to refine and use math language.

- 6.1 Student Self-Efficacy: Materials provide opportunities for students to think mathematically, persevere through problem-solving, and make sense of mathematics, while supporting them in understanding multiple ways to solve problems and requiring them to engage with math through doing, writing, and discussion.
- 6.2 Facilitating Productive Struggle: Materials support teachers in guiding students to share and reflect on their problem-solving approaches, offering prompts and guidance for providing explanatory feedback based on student responses and anticipated misconceptions.

Challenges

- 1.1 Course-Level Design: Materials do not include a scope and sequence outlining the TEKS, ELPS, concepts, and knowledge taught in the course, lack suggested pacing guides for various instructional calendars, do not provide explanations for concept connections.
- 1.3 Lesson-Level Design: Materials do not include daily objectives required to meet the content and language standards.
- 2.1 Instructional Assessments: Materials lack diagnostic assessments with varied tasks and questions, lack teacher guidance for consistent administration, and do not include standards-aligned items.
- 2.2 Data Analysis and Progress Monitoring: Materials do not include tools

- for students to track their own progress and growth.
- 3.3 Support for Emergent Bilingual Students: Materials do not provide guidance for teachers in bilingual/ESL programs.
- 4.1 Depth of Key Concepts: Materials lack questions that progressively increase in rigor and complexity, leading to grade-level proficiency in mathematics standards.
- 5.2 Development of Fluency: Materials do not evaluate procedures for efficiency and accuracy.
- 5.3 Balance of Conceptual Understanding and Procedural Fluency: Materials do not include tasks that use concrete models, pictorial representations, or abstract representations, nor provide support for students in connecting and explaining concrete models to abstract concepts.
- 5.5 Process Standards Connections: Materials do not describe how process standards are connected throughout the course or within each unit.

Summary

i-Ready Mathematics is a grade 4 Mathematics program offering instruction for mathematics acquisition at the fourth-grade level. There is a detailed, year-long scope and sequence to assist with comprehensive planning for the educators using the instructional materials. Each unit includes an instructional overview with previously taught concepts and vocabulary support. The instructional materials include guidelines for campus administration to evaluate the use of the curriculum when present in a classroom. There is an extensive teacher toolkit with multiple resources to reinforce and extend lessons that assist and support teachers in planning instruction. The instructional materials incorporate a family connection component, giving families activities to do at home that promote the goals of each unit. There are thorough, easy-to-navigate online student components to support student learning and unit goals further. The instructional materials have activities and instruction for emergent bilingual students and have options to reteach or extend lessons.

Campus and district instructional leaders should consider the following:

- The product does not explicitly reference the TEKS in the lesson materials. Since the product does not provide a scope and sequence of the TEKS, districts would need to develop their own.
- The materials provide a large bank of resources to inform families about their student's learning. Family letters for each lesson explain the concepts students are learning, offer activities to work on at home, and are available in 11 languages. The materials provide a family slideshow for a beginning-of-the-year introduction to *i-Ready*, which gives an overview of the product and shows families how to access additional resources.

Intentional Instructional Design

1.1	Course-Level Design	9/15
1.1a	Materials include a scope and sequence outlining the TEKS, ELPS, concepts, and knowledge taught in the course.	0/5
1.1b	Materials include suggested pacing (pacing guide/calendar) to support effective implementation for various instructional calendars (e.g., varying numbers of instructional days – 165, 180, 210).	2/2
1.1c	Materials include an explanation for the rationale of unit order as well as how concepts to be learned connect throughout the course.	1/2
1.1d	Materials include guidance, protocols, and/or templates for unit and lesson internalization.	2/2
1.1e	Materials include resources and guidance to support administrators and instructional coaches with implementing the materials as designed.	4/4

The materials do not include a scope and sequence outlining the TEKS, ELPS, concepts, and knowledge taught in the course. Materials include suggested pacing (pacing guide/calendar) to support effective implementation for various instructional calendars (e.g., varying numbers of instructional days). Materials do not include an explanation for the rationale of unit order. Materials include an explanation of how concepts to be learned connect throughout the course. Materials include guidance, protocols, and/or templates for unit and lesson internalization. Materials include resources and guidance to support administrators and instructional coaches with implementing the materials as designed.

Evidence includes, but is not limited to:

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

- The i-Ready Classroom K–8 Teacher Toolbox and program implementation materials include pacing guidance for the year and a unit overview outlining concepts, knowledge, and topics taught throughout each unit aligned to the TEKS. The materials did not provide a scope and sequence of ELPS or TEKS taught within the course. Process standards are labeled throughout the units.
- The Texas Ready Teacher Toolbox program implementation and the TEKS and ELPS Standards Correlations provide correlation charts that outline alignment to TEKS and ELPS breakouts in each lesson and process standards throughout the resource. Links include examples of the TEKS and ELPS breakouts being addressed within course materials, however breakouts are not used for instructional purposes, only for standards alignment. The document does not include a scope and sequence

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 i-Ready Classroom K–8 Teacher Toolbox program implementation includes pacing guidance for the year suggesting a range of instructional days from 160–190 days outlining the TEKS addressed in each unit. This range supports implementation across a range of instructional calendars. The pacing guide for Texas in the grade 4 online resource outlines the lessons and TEKS correlating to each lesson.
- The i-Ready Success Central Pacing Calendar Teacher Tool materials include a year-long pacing guide that provides recommended schedules and time frames to keep units and lessons on pace. The resource provides a pacing calendar template for additional planning support that coincides with the provided pacing calendar. Pacing guidance in the Teacher Toolbox includes unit overviews that outline the concepts taught and include suggested pacing for each unit to use flexibly alongside district calendars. Pacing guidance references 155 instructional days and 6 days to administer assessments.
- The i-Ready Success Central Priority Topics Overview provides allocation of instructional days to ensure students engage with priority topics in each unit. The resource provides support to condense pacing within the Success Central link in a video format. The materials suggest pacing that outlines each unit and gives flexibility to accommodate different instructional calendars. There is an Instructional Day Tracker which allows teachers to allocate and track instructional days flexibly as a result of varying numbers of instructional days per unit.
- Alternative schedules with the i-Ready Classroom Guide in Success Central of the digital component, give recommendations and examples of how to adjust pacing according to instructional days, minutes, and schedules.

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

- Materials explain how concepts learned connect through subsequent units in the course.
- The i-Ready Teacher Toolbox, Beginning of Unit, Lesson Progression document provides an overview of skills for students to build upon and prepare for in Unit 1 for place value, addition, and subtraction with a flow chart of how lessons and units connect to different grade levels and within the grade level. This resource lists the instructional units for each grade level (grade K–grade 5) and the material provides the content focus for each unit.
- The i-Ready Teacher Toolbox, Program Implementation, Unit 1 - Beginning of Unit, the Unit Flow and Progression Video supports student understanding across the unit and provides an overview of strategies contained in the unit as well as how they connect to support student understanding of place value across the unit and how to build on foundational skills to work toward more complex skills.
- The i-Ready Teacher Toolbox, Priority Topics Overview video, found in Success Central resources, outlines the intentional sequence of standards and provides explanations of how units connect. The video includes four priority topics of the grade level and graphics to show the time spent on each unit and how skills are built in subsequent units.

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

- The i-Ready, Success Central, Unit Planning section includes a Unit Preparation Teacher Tool that guides teachers to plan the start of a unit and establish unit goals, build academic vocabulary, anticipate common misconceptions and errors, make connections to future learning, and calendar the pace of the unit.
- Materials include a Lesson Preparation Template Teacher Tool in i-Ready Success Central that provides preparation to understand student strategies, prerequisite skills, key concepts, and vocabulary for lesson internalization. The resource gives directions to utilize the template and supports teachers to practice and understand student strategies and enduring understandings. Teachers use the resources to support the pace of each session of the lesson, think through the session, and implement the lesson.
- Materials include a Lesson Preparation Support Tool in i-Ready Success Central that provides guidance and recommends program features to support student learning and lesson objectives in tandem with the materials' features to prepare and familiarize teachers with upcoming lessons. Volume 1 of the Teacher's Guide provides an overview that includes a description of each part of the unit introduction and the components of the instructional materials.

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

- The i-Ready Success Central section includes a Conducting a Learning Walk tool that provides a collaborative framework overview to guide instructional leaders through preparation, evidence collection, analysis, reflection, and implementation to strengthen teaching and learning.
- The i-Ready Success Central section includes a Collaborative Learning Extension: Unpacking a Unit guide to facilitate meetings that support teachers in planning and unpacking a unit, and provides a template to lead professional learning communities with an agenda, focus questions, core activities, and action planning. This document guides administrators or instructional coaches to implement the materials as designed. It guides instructional leaders to Prepare, Reflect, Plan, and Apply the framework to sustain the implementation of materials.
- Try-Discuss-Connect Classroom Visits Bundle Tools, found in professional growth learning walks in Success Central provide leaders with a tool to identify an area of focus for classroom visits, including explicit teacher and student actions to look for during the visit.

Intentional Instructional Design

1.2	Unit-Level Design	4/4
1.2a	Materials include comprehensive unit overviews that provide the background content knowledge and academic vocabulary necessary to effectively teach the concepts in the unit.	2/2
1.2b	Materials contain supports for families in both Spanish and English for each unit with suggestions on supporting the progress of their student.	2/2

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

Evidence includes, but is not limited to:

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

- Each unit has a Teacher’s Guide Overview, found at the beginning of each unit in the Teacher’s Guide, and includes the lesson overview, content objectives, prior knowledge, math vocabulary, learning progression, and a pacing guide with resources to effectively teach the concepts of the unit. Lesson progression provides direct connections to specific lessons in the previous grade level, the current content for each particular lesson in the unit, and direct connections to specific lessons and content in the following grade level provided at the beginning of each unit.
- Each unit has Build Your Vocabulary in the Teacher Toolbox at the beginning of each unit, to incorporate content vocabulary for the unit, identifying new and previously learned content vocabulary, along with pertinent academic vocabulary.
- Materials provide videos presenting the flow and instructional progression of content within the unit. The videos show an overview of instruction, model instructional implementation of manipulatives, and explain connections within the content.

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

- Introduce i-Ready Classroom Mathematics to Families in Success Central in the Connect with Families feature, provides communication in English with caregivers on how to use the program to support their student. This letter provides families with explanations of content and related vocabulary, pictures of manipulatives, examples of representations, and explanations of the learning taking place in the sessions found in the lesson. This resource also indicates available learning games, math tools students can use, and content activities related to current learning.

- Introduce i-Ready Classroom Mathematics to Families - Spanish in Success Central in the Connect with Families feature provides communication in Spanish with caregivers on how to use the program to support their student. This letter provides families with explanations of content and related vocabulary, pictures of manipulatives, examples of representations, and explanations of the learning taking place in the sessions found in the lesson. This resource also indicates available learning games, math tools students can use, and content activities related to current learning. The letter is provided in the following languages: Amharic, Arabic, Korean, Mandarin, Portuguese, Russian, Somali, Tagalog, and Vietnamese.

Intentional Instructional Design

1.3	Lesson-Level Design	28/34
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.	24/30
1.3b	Materials include a lesson overview outlining the suggested timing for each lesson component.	1/1
1.3c	Materials include a lesson overview listing the teacher and student materials necessary to effectively deliver the lesson.	2/2
1.3d	Materials include guidance on the effective use of lesson materials for extended practice (e.g., homework, extension, enrichment).	1/1

The materials include comprehensive, structured, detailed lesson plans that include questions, tasks, materials, and instructional assessments required to meet the content and language standards of the lesson. Materials do not include daily objectives required to meet the content and language standards of the lesson. Materials include a lesson overview outlining the suggested timing for each lesson component. Materials include a lesson overview listing the teacher and student materials necessary to effectively deliver the lesson. Materials include guidance on the effective use of lesson materials for extended practice (e.g., homework, extension, enrichment).

Evidence includes, but is not limited to:

Materials include comprehensive, structured, detailed lesson plans that include daily objectives, questions, tasks, materials, and instructional assessments required to meet the content and language standards of the lesson.

- The overarching lesson contains content and language objectives. The materials do not include daily content and language objectives within each session of the lesson.
- The i-Ready Teacher Toolbox lesson materials include pacing guidance, content and language objectives supporting student learning and progression with questions and tasks to complete, and a list of materials. Lessons break down into parts. The overarching lesson contains lesson objectives with bulleted teacher instructional points and possible student answers. Tasks and activities include content-related questions for teachers to use with the included materials and conclude with an opportunity to assess student understanding of the overarching lesson objective(s).
- The i-Ready Teacher Toolbox Reteach Tools for Instruction sections provide an activity supporting content language development. Lessons break down into sessions representing instructional days. The overarching lesson contains content and language objectives. The sessions include the purpose and instructional materials for teachers and students to interact with. Tasks and activities include content-related questions for teachers to use with the materials. Sessions conclude with an opportunity for assessment and closure.

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

- The i-Ready Teacher Toolbox lesson materials include pacing guidance in each session that provides a lesson flow with suggested amounts of time. The Math in Action portion of the lesson includes a pacing guide for teachers within the teacher manual. Within each lesson, suggested timing for each instructional component is provided. These suggested timings include, but are not limited to, the following components: Start, Model It, Discuss It, Connect It, Monitor & Guide, Group & Differentiate, Close: Exit Ticket.
- The i-Ready Teacher Toolbox Beginning of Unit provides a unit and lesson support document that outlines the number of days suggested to prepare students for the lesson and to spend teaching the lesson. Each lesson includes a pacing guide with suggested amounts of time for each component of the lesson cycle: Start, Try It, Discuss It, Connect It, Close. Timing guidelines are specific to the session and the components within the session.

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

- The i-Ready Teacher Toolbox, Instruction, and Practice provides an overview of print and digital resources for students and teachers to use during the unit. The Lesson Overview lists teacher-facing materials, suggested timing to pace the sessions of the lessons, and materials to address differentiation, with materials marked with an identified icon. Teacher materials and student materials are pictured in the Teacher's Guide with suggested answers provided for the student workbook. Student materials are found in the student workbook with the lesson number and session number identified at the top of each page and with the instructional component's name listed on the page (i.e., Start, Model It, Discuss It, etc.).
- The i-Ready Success Central, Get To Know i-Ready Classroom Mathematics provides suggested resources for the lesson cycle for practice and assessment components that reinforce mathematical understanding and informed decision-making within each portion of the lesson cycle. The guide shares the components that are essential for instruction, components to use for practice opportunities, and components for assessment opportunities. The Instruct section gives guidance on what materials are used in the hands-on activities, and student book pages are listed on the first page of the lesson with a note indicating to visit the Teacher Toolbox for additional resources.

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

- The i-Ready Teacher Toolbox Lesson Overview provides extension activities in the extend tab of the differentiation section. The overview pacing guide indicates the location of extension activities under the differentiation tab in the Teacher Toolbox. The session instruction provides guidance for the teacher to differentiate learning to extend the lesson content. Materials are listed, suggested questioning is provided, and suggested guidance is supplied when

determining when and how to use the extension activities. Materials include guidance in each lesson for differentiation to reteach, reinforce, or extend.

- The i-Ready teacher Toolbox, Instruction, and Practice, provides an overview of print and digital resources used to differentiate and extend instruction. The teacher-facing materials provide directions and possible answers in the form of an answer key to support teachers in implementing the activity to enrich or extend effective learning for diverse learners.

Progress Monitoring

2.1	Instructional Assessments	15/24
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.	8/12
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.	3/6
2.1e	Instructional assessments include standards-aligned items at varying levels of complexity.	1/2

The materials include a variety of instructional assessments at the unit and lesson level (including diagnostic, formative, and summative) that vary in types of tasks and questions. Materials do not provide diagnostic assessments with varying types of tasks and questions. Materials include the definition and intended purpose for the types of instructional assessments included. Materials do not provide teacher guidance in administering the majority of instructional assessments. Materials include teacher guidance to ensure consistent and accurate administration of the diagnostic assessments. TEKS and objective alignment are not evident in all diagnostic, formative, and summative assessments. Instructional assessments include items at varying levels of complexity. Materials do not include instructional assessments with standards-aligned items.

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.

- A description of a diagnostic assessment is available in the curriculum, but there is no access to the diagnostic assessment to evaluate and ensure its alignment with the TEKS and variety of questions and tasks as required by the indicator. According to the description, diagnostic assessments are available at the beginning, middle, and end of the year.
- The i-Ready Teacher Guide Assessment Guide, under Resources for Assessment and Differentiation, provides a list of diagnostic, formative, and summative assessments at the lesson and unit level that vary in the type of tasks. Longer units include mid-unit and comprehension checks. The resource outlines assessments and reports available at the unit and lesson level and guides with a variety of assessments and when to implement them.
- The materials provide a variety of print and digital assessments. i-Ready Teacher Toolbox End of Unit provides different assessment forms for the end of each unit and longer units include mid-unit assessments that vary in form. Other assessments include lesson quizzes, comprehensive checks, and opportunities for a variety of informal assessments. The

assessments vary in the types of tasks, including quizzes, pre-assessments, try-it, and exit tickets. The materials provide a variety of different types of questions for students to answer. The unit reviews include content-related performance tasks with opportunities for students to reflect on their mathematical thinking.

- The Ready Texas Teacher Toolbox provides a TEKS Practice section at the end of each lesson. Question types vary in format, including multiple-choice, multi-select, drag and drop, text entry, open-ended with multiple possible answers, and items students solve and display one correct solution.

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

- The resource provides a reference sheet for assessment opportunities in i-Ready Success Central Assessment Opportunities, which defines the four types of assessments available within the program and the purpose of each assessment to evaluate learning, inform instruction, and provide baseline data. The reference sheet suggests when each assessment should be administered.
- The explanations in the User's Guide provide definitions, intended purpose, and guidance on the types of assessments and how to use the assessments to inform instructional decisions with descriptions of the information collected upon student completion.
- The resource provides a one-page guide found in the Diagnostic and i-Ready Classroom Mathematics Guide for teacher support with an overview of the purpose of the assessment and how the resource adapts to demonstrate student proficiency and foundational knowledge. Graphics provide support to demonstrate how the assessment identifies learning gaps and monitors the progress of student learning.

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

- The instructional materials guide the administration of the diagnostic assessment with schedule-based and recommended testing sessions based on average testing time. i-Ready Success Central Diagnostic Proctoring Guide provides tips for teachers to use as diagnostic assessments are administered. Materials provide administration guidance for the Diagnostic assessment in a checklist format. Guidance includes suggestions on how to prepare for the assessment, schedule the assessment, prepare students, actively monitor the testing session, and track student completion.
- The Get Good Data Action Plan provided by the resource gives teachers guidance on the timing of the diagnostic assessment, preparing for the assessment, strategies for proctoring the assessment, motivating students, and tracking the completion of the assessment. The materials provide a reflective action plan to support planning a successful Diagnostic assessment. The guidance on scheduling the assessment includes the suggested number of testing sessions and the suggested time for each session per grade level. Teachers are guided to reflect on how they will get organized, prepare and motivate students, actively monitor the

testing session, and track student completion. Each teacher's action is accompanied by tips to guide and direct what teachers should do to support students and the testing environment.

- The resource does not guide assessment opportunities beyond the diagnostic assessment and lacks guidance on administering the additional assessments provided by the resource.
- The instructional material provides information about the lesson quiz but does not provide clear guidance to ensure consistent and accurate administration of the assessment.

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

- The i-Ready Texas TEKS Practice section indicates alignment with the curriculum and assesses student expectations for each lesson, but does not identify aligned TEKS.
- The i-Ready Teacher Toolbox End of Unit Assessment questions indicate alignment with lesson objectives, and classroom materials include summative unit assessments. These assessments show evidence of alignment within unit themes.
- The materials do not identify the TEKS assessed in the lesson quizzes or the unit assessments. The quizzes in the teacher manual and teacher toolbox align with the lesson objectives and depth of knowledge is evident.
- The dashboard provides evidence that the diagnostic assessment aligns with the TEKS. The questions in the diagnostic assessment are not available to evaluate for alignment to the TEKS.
- Materials include formative assessments built into the lessons that address the TEKS and objectives listed within the lessons. Lessons in the Ready Texas Resource provide formative assessment opportunities aligned to the TEKS and the Ready Texas lesson.

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

- The materials have varying levels of complexity but do not include standards-aligned items for all instructional assessments.
- The i-Ready Teacher Toolbox End of Unit Assessment questions indicate alignment with lesson objectives. The materials do not identify the standards assessed in the lesson quiz or the unit assessment. Depth of knowledge is available, but the materials do not identify the TEKS in these sections.
- Ready Texas materials include formative assessments built into the lessons that address the TEKS and objectives listed within the lessons. In Part 3 of Lesson 13 materials, two questions under Try It align with the TEKS and objectives listed on the first page of the lesson.
- The Dashboard provides evidence that the diagnostic assessment is aligned with the TEKS.

Progress Monitoring

2.2	Data Analysis and Progress Monitoring	3/4
2.2a	Instructional assessments and scoring information provide guidance for interpreting and responding to student performance.	2/2
2.2b	Materials provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments.	1/1
2.2c	Materials include tools for students to track their own progress and growth.	0/1

The materials include instructional assessments and scoring information that provide guidance for interpreting and responding to student performance. Materials provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments. Materials include tools for students to track class progress and growth. 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 i-Ready Success Central Analyze Your Class Data resource provides direction for making sense of class data using results reports and responding to student performance. The materials provide opportunities to interpret and respond to student performance with a template to analyze data and plan an approach to address unfinished teaching and learning.
- The i-Ready Success Central Data Analysis Guide provides guidance using different reports to analyze data, progress, learning needs, and learning about performance. The materials guide educators to run data reports based on district, school, class, and other data, and how to respond to the data.
- The Teacher Tool and the Data Analysis Guide provide directions on how to analyze data from the diagnostic assessment and how to make instructional decisions using the prerequisite report from this data and suggest resources for supporting students' learning. The included materials explain how to look at student data in the dashboard, suggest actions to take based on data, and include teacher protocols and templates to plan the next steps using available resources based on observations and reflections from the data.
- The instructional materials guide teachers to utilize the comprehension checks in the Success Central area to interpret student performance and respond to student performance. The information guides teachers on how to view scores, look at items, see correct answers, and analyze students' partially correct or incorrect responses.

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

- The i-Ready Success Central Comprehension Check Results Student Sheet guides teachers in analyzing student results for purposeful planning for student support. The materials supply a response analysis to support students in a certain lesson or for a specific objective.
- The i-Ready Success Central Analyze Your Class Data resource provides direction for making sense of class data using results to plan support for all students and offer information on how to respond to student performance.
- The materials suggest differentiation activities at the end of unit assessments that incorporate reteaching, reinforcing, and extension activities responding to performance on the unit assessments.
- Materials provide a teacher tool to guide teachers on how to use the diagnostic assessment data to inform instructional decisions. The guidance provides direction on how to analyze the data and recommends where to find resources and guidance to address student needs.

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

- The i-Ready Success Central Personalized Instruction Class Data Trackers Student Tool lacks the opportunity to reflect on individual student goal-setting, data, and assessment, with no evidence of tools for students to use to track individual progress or growth.
- Instructional material in Success Central, Use Data section guides teachers to plan and execute class data chats with guiding questions to support teachers in making observations and reflecting on student data in preparation for the data chat. There are no tools available for individual student use during the data chats. Tools are not available for students to track their own progress and growth as required by the indicator.
- The i-Ready Success Central At Home Student Data Tracker provides a document students can use to track their at-home learning progress. Students track and reflect on the number of minutes working and the number of lessons by identifying one thing learned to document their at-home learning progress during the week.
- The i-Ready Success Central Personalized Instruction Class Data Trackers Student Tool provides class data trackers for students to track progress toward class goals with opportunities for students to reflect on class learning at the end of the unit.

Supports for All Learners

3.1	Differentiation and Scaffolds	8/8
3.1a	Materials include teacher guidance for differentiated instruction, activities, and/or paired (scaffolded) lessons for students who have not yet reached proficiency on grade-level content and skills.	3/3
3.1b	Materials include pre-teaching or embedded supports for unfamiliar vocabulary and references in text (e.g., figurative language, idioms, academic language). (T/S)	2/2
3.1c	Materials include teacher guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skills.	3/3

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

Evidence includes, but is not limited to:

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

- The i-Ready Teacher Toolbox Lesson 1 Tools for Instruction guides differentiated instruction to support students to reach proficiency in grade-level content and skills. The materials include differentiation resources to guide teachers in what data to use to determine student needs, when to use the resources, where to find the resources, what differentiation resources to use, steps to teach each skill, and suggested lesson duration.
- The Tools for Instruction provides teacher guidance for supporting students with in-time differentiated instruction to help students who need additional instruction with their learning needs. The resource suggests bulleted mini-lessons recommended to be taught using manipulatives in 20–30 minutes. The Tools for Instruction concludes with a Check for Understanding that includes teacher guidance for pinpointing and addressing additional support students may need.
- The i-Ready Teacher Toolbox Math Center Activities for multiple lessons provide three levels of activities for students based on students’ proficiency levels: below level, on level, and above level. The materials guide teachers to use various strategies and include reteaching components for students who have not mastered the lesson objective. The materials include a teacher answer key for the resource and how to check for student understanding of the differentiated tasks.
- The Prerequisite Report Overview provides teacher guidance for the resources included in the prerequisite report to support students’ unfinished learning. Unit and Lesson Support and a

Yearly Pacing for Prerequisites are referenced and explained to support teachers in planning scaffolded lessons to build skills needed to master concepts in each lesson with a suggested duration of 10–15 minutes.

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

- Each unit in the i-Ready Teacher Toolbox provides materials to support the pre-teaching of academic vocabulary for students. The teacher guide provides instructional guidance on implementing language routines that support students in learning vocabulary. For example, in Unit 1 the Build Your Vocabulary section includes materials to pre-teach vocabulary for the unit encouraging students to use current thinking to define words and later adjust their thinking after participating in the academic vocabulary routine. The resource also includes cognate support for exploring and using cognates in instruction and lists cognates for Spanish and Haitian Creole.
- The materials provide additional practice to support vocabulary development in each lesson with graphic organizers and using pictures, words, numbers, and symbols to develop understanding. For example, in the i-Ready Teacher Toolbox Lesson 1 Session 1 Additional Practice section there is an activity for students to support vocabulary development and have students make real-world connections with the vocabulary word.
- The materials include pre-teaching academic vocabulary for each unit with students creating individual definitions based on current thinking with partners and a glossary to revise new learning of the definition. For example, the i-Ready Teacher Toolbox Unit 1 Beginning of Unit Connect Language to Mathematics Development section supports math and academic vocabulary with a routine to assess prior knowledge, pronounce, define, and use words.
- The instructional materials include supporting academic and math vocabulary development by building an academic vocabulary routine including assessment of prior knowledge, pronouncing and defining the content vocabulary, and using the content vocabulary in the unit. The instructional materials guide teachers in developing academic language within the lesson notes in the teacher manual.
- The Teacher’s Guide directs teachers to use the student resource Prepare for Dividing Multi-Digit Numbers to support vocabulary development. The guidance suggests teachers help students in saying the vocabulary, noticing the beginning of the words, and comparing and contrasting the words *dividend* and *divisor*. The guidance suggests students include individual definitions and examples in the graphic organizer including words, numbers, and pictures to explain their thinking.

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

- The Reinforce Math Center Activities provide leveled activities for students showing on-level, below-level, and above-level understanding of the lesson content. The materials include Check for Understanding and Go Further for students to apply their learning. The included resource provides a teacher answer key for the resource.

- The lesson materials include an enrichment activity at the end of each lesson with both teacher and student materials for students to challenge their thinking and reinforce concepts.
- Embedded within the teacher guidance for the session instruction are opportunities to differentiate and extend instruction for students showing proficiency with the content through a lesson component called Deepen Understanding. For example, in lesson 23, session 2 differentiated questioning prompts students to think about rewriting fractions with common denominators to compare them.

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).

- The i-Ready Teacher Toolbox Lesson 1 Session 2 Teacher’s Guide provides guidance to support instruction, which includes prompts and guided instruction in each lesson to support the teacher in modeling, explaining, and communicating each concept directly and explicitly. The Teacher’s Guide provides possible student answers and models teachers can use to facilitate instruction. Instructional information, including questioning, common misconceptions, and sequencing strategies, are found in the margins of the Teacher's Guide. The sessions break down into different components, for example, Try It, Model It, Connect It, and Apply It, that support teachers in determining how to present the information to students.
- The i-Ready Teacher Toolbox Unit 2 Beginning of Unit Math Background provides guidance in Unit Themes to unpack learning progressions and make connections between key concepts using unit themes and prior knowledge. The Math Background information includes prior knowledge and insights on the mathematical content of the unit to support teachers with the language of the content, the knowledge needed to explain the content, and the mathematical models that represent the mathematical content.
- The materials provide PowerPoint instructional slides that include lesson notes with teacher guidance on questions to ask, misconceptions, and error alerts. The information in the slides duplicates information from the teacher manual and provides specific parts of the lesson, such as Notice and Wonder questions for the initial Try It Task.
- The materials include guidance and prompts to develop instructional routines with Building Routines with Start Activities, Incorporating Manipulatives in Instruction, Establishing Language Routines, and Getting Students Talking with Try-Discuss-Connect. These

instructional materials provide detailed guidance to support teachers in modeling, explaining, and communicating concepts. The manual provides teachers with solutions to tasks, prompts for questioning with possible student responses included, and an immediate reteach for differentiation.

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

- The i-Ready Teacher’s Guide Program Overview, A Powerful Instructional Framework section, provides a framework that incorporates multiple routines and best practices to develop a deeper understanding by integrating language and mathematics. The materials include teacher guidance for effective lesson delivery with an instructional framework of Try-Discuss-Connect that incorporates multiple routines and best practices to develop a deeper mathematical understanding.
- The instructional resource provides teachers an overview of the components of the lesson such as Deepen Understanding, Discourse Questions, and Structure and Reasoning. Within the overview, the resource guides lesson delivery within these sections of the lessons. The materials include teacher guidance and recommendations for effective lesson delivery and facilitation by using a variety of instructional approaches such as math talk with whole group discussion, exit tickets, pair-share, and hands-on activities.
- The planning and teaching guide in Success Central of the instructional materials guides teachers to use a variety of instructional approaches and provides support for teachers by distinguishing when to use whole group lessons, small group teaching, or a rotations model. The Teacher’s Guide provides guidance on the delivery of the lesson and included within the session are varied resources/session components that support students in connecting to prior learning, mathematical discourse, connecting concrete models to mathematical pictures and abstract representations, and consolidating learning.
- The resources provide an accompanying slide deck to help facilitate instruction. The slide deck includes slides for the opening routine that vary from session to session. The slides facilitate different components of the lessons like Try It and Connect It. Other slides help facilitate student interaction by prompting discussions or using the 4Rs (Repeat, Rephrase, Reword, Record) to process student learning. Each slide includes guidance on usage or teacher instructional information.

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 i-Ready Success Central Planning and Teaching Guide provides steps for guided whole group, independent, and partner practice. The pacing guide for each lesson lists a variety of practices for students to apply their learning.
- The i-Ready Beginning of Unit Resources provides a list of digital and print resources supporting multiple types of practice organized into four categories: in-class instruction and

practice, independent practice for school or home, assessments and reports, and differentiation.

- The instructional days in the materials break down into components identified with header titles, such as Try It, Model It, Connect It, and Apply It. These headers indicate components of the Try-Discuss-Apply Framework, which guides teachers with the different types of practice to use in the classroom.

Supports for All Learners

3.3	Supports for Emergent Bilingual Students	10/11
3.3a	Materials include teacher guidance on providing linguistic accommodations for various levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language.	2/2
3.3b	Materials include implementation guidance to support teachers in effectively using the materials in state-approved bilingual/ESL programs.	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.	8/8
3.3d	If designed for dual language immersion (DLI) programs, materials include resources that outline opportunities to address metalinguistic transfer from English to the partner language.	Not scored

The materials include teacher guidance on providing linguistic accommodations for various levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language. Materials do not include implementation guidance to support teachers in effectively using the materials in state-approved bilingual/ESL programs. Materials include embedded guidance for teachers to support emergent bilingual students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through oral and written discourse. Materials were not designed for dual language immersion programs, and are not scored.

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 i-Ready Teacher Toolbox Lesson Overview guides the Content to Language Development section to prepare for specific embedded differentiation to increase the usage of more academic language. These supports provide unit-level language supports to scaffold and activities to build student’s vocabulary and connect language development to mathematics, but do not reference English Language Proficiency Standards.
- The Resource for Language Development is part of the User’s Guide that explains the different language supports available within the product. A chart in the materials explains the different language domains and language expectations for language proficiency levels. The chart has valuable information for teachers, but it is not aligned with the levels of language proficiency as defined by the English Language Proficiency Standards.
- The i-Ready Teacher Toolbox User’s Guide Resources for Language Development guides to build academic language and support effective communication across language domains. The

resource explains language domains and proficiency levels but does not reference the ELPS. The language expectations within the teacher manual fail to align with the language descriptors outlined by the ELPS. Language expectations within the ELPS have four categories: Beginning, Intermediate, Advanced, and Advanced High. The instructional materials identify five levels of language expectations and are not in alignment with the ELPS.

- At the beginning of each unit, the materials provide teachers with examples of what emergent bilingual students can do based on their English language proficiency level and in connection with the learning target for each unit for guidance in differentiated instruction; however, the materials do not reference ELPS.
- The materials guide teachers to plan and prepare differentiation for emergent bilinguals students in each lesson based on the levels of language proficiency and different strategies to connect to the mathematical lesson. The materials fail to reference English Language Proficiency Standards.
- The WIDA Prime V2 Correlation indicates that the “Ready Classroom Mathematics uses levels similar to WIDA’S Language Proficiency Levels” rather than the levels being aligned to the ELPS.

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

- The i-Ready Teacher Toolbox Implementation section provides a WIDA Prime V2 Correlation that is not aligned with state-approved bilingual/ESL programs or the English Language and Proficiency Standards.
- Materials do not include implementation guidance to support teachers in effectively using the materials in state-approved bilingual/ESL programs.

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

- The materials include a variety of overall guidance supports to help emergent bilingual students develop academic vocabulary, increase mathematical comprehension, build background knowledge, and make cross-linguistic connections by identifying key unit-level language supports and how to use them.
- The materials routinely include teacher guidance in each session for emergent bilingual students with a variety of specific activities related to the learning target based on each student’s language proficiency. The materials provide teacher guidance so that beginning emergent bilingual students are familiar with direction/location words, and clarify multi-meaning words like round, and gesture to show they understand the meaning before students work with partners. Teachers remind and review intermediate emergent bilingual students with keywords and phrases before students work to solve the problems with a partner, and teachers provide thinking time and sentence stems to assist advanced emergent bilingual students.

- “Differentiation: English Learners” is embedded within each lesson to be used within the instructional sessions. The guidance includes supporting students with comprehension strategies that address language domains. Materials include teacher guidance on having students speak and write to better comprehend the Connect It problems.
- Embedded within the instructional sessions is Develop Academic Language guidance. The guidance includes supporting students by using academic language in the classroom. Lessons include teacher guidance on having students use precise language and include suggested sentence frames.
- Within the unit, the resource is Build Your Vocabulary, which focuses on reviewing vocabulary and general academic vocabulary. The teacher’s guidance provides suggested routines to help students use and retain the language. Cognate Support guides using cognates in the classroom and lists cognates in Spanish and Haitian Creole.

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 include resources that outline opportunities to address metalinguistic transfer from English to the partner language with a Cognate Support Routine. The materials direct the teacher to use the Cognate Support Routine before the unit for students speaking Spanish or other Latin-based languages. For example, the Unit 1 Build Your Vocabulary section, Cognate Routine states, “Ask students if any of the academic words look or sound similar to a word in their first language.... Explain to students that words in two languages that share the same or similar meaning, spelling, and pronunciation are called cognates. Write the cognates and have students copy them in their book next to the academic words.” The materials list cognates for teachers in the Build Your Vocabulary section of each unit.
- The materials include resources that outline opportunities to address metalinguistic transfer from English to the partner language through a Bilingual Glossary. The Student Worktext materials include a bilingual glossary that provides vocabulary words and terms in English and Spanish with pictorial representations.

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.	0/1
4.1b	Questions and tasks progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics standards.	1/2

The materials do not offer practice opportunities over the course of a lesson and/or unit requiring students to demonstrate depth of understanding aligned to the TEKS. Tasks in the materials progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics standards. Questions in the materials do not progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics standards.

Evidence includes, but is not limited to:

Practice opportunities over the course of a lesson and/or unit (including instructional assessments) require students to demonstrate depth of understanding aligned to the TEKS.

- The content objectives in the instructional materials of the lesson overview do not support the depth of understanding aligned with the TEKS. TEKS 4.2F expects the student to compare and order decimals using concrete and visual models to the hundredths. The instructional materials provide students with opportunities to practice comparing decimal place values with models and comparison statements but practice opportunities with concrete tools are limited to differentiation or students who struggle with pictorial models or comparison statements. All students are required to compare fractions using models per the TEKS; however, the manual leaves concrete models up to teacher discretion when presented as a tool for differentiation. The end-of-lesson quiz does not provide practice for students to compare decimals to the hundredths using concrete and visual models to the depth of understanding aligned to the TEKS.
- The instructional materials do not provide evidence of relevant tasks and problem situations that align with the depth and rigor of the TEKS in Lesson 1, understanding place value. TEKS 4.2B requires students to represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals. In Lesson 1, the materials show evidence of representing the value of the digit in whole numbers through hundred thousand, not through 1,000,000,000, and the lesson does not address decimal place value.
- Sessions 1–3 in Lesson 2 of Unit 1 provide practice opportunities designed to engage students in the appropriate level of rigor. The lesson objectives in each session do not allow students to order numbers, only compare, which does not fully support the depth of understanding of the TEKS.
- The instructional materials' cumulative practice provides students with opportunities within a unit or lesson to demonstrate their understanding of different sessions they have explored

from previously learned content. A variety of question types are provided, including open-ended and fill-in-the-blank questions. The materials do not allow students to demonstrate the depth of understanding aligned with the TEKS.

- Headings throughout the session lessons provide students with varied practice opportunities. Session 2 of Lesson 18 in the fluency and skills practice session includes the rationale and guidance for students to show their knowledge of facts but not the depth of understanding aligned with the TEKS.

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

- The Unit 2 assessment provides students the opportunity to demonstrate their understanding of different types of problems and tasks from the content covered throughout the unit. The unit assessment indicates the problems have minimal variation in levels of complexity, ranging from DOK 1 to DOK 2. The complexity of questions does not align with the grade-level proficiency.
- The end of each unit concludes with Math in Action lessons that guide students through tasks by applying the learning objectives from the lessons within the unit. The Math in Action Unit 2 Session 1 includes an open task for students to apply their understanding of multiples and multiplicative relationships.
- The instructional materials include mid-unit assessments that do not vary in rigor and complexity of questions and tasks more than one level. The mid and end-of-unit assessments in Unit 4 show the same type of item assessed multiple times. While the item in the refine section provides reasoning for the students, the level of rigor is the same in the mid-unit and end-of-unit assessments.
- The materials show evidence of questions related to place value through the hundred thousand but do not show evidence of increasing the rigor and complexity to include grade-level proficiency of the millions or billions.

Depth and Coherence of Key Concepts

4.2	Coherence of Key Concepts	12/12
4.2a	Materials demonstrate coherence across courses/grade bands through a logically sequenced and connected scope and sequence.	2/2
4.2b	Materials demonstrate coherence across units by explicitly connecting patterns, big ideas, and relationships between mathematical concepts.	3/3
4.2c	Materials demonstrate coherence across units by connecting the content and language learned in previous courses/grade levels and what will be learned in future courses/grade levels to the content to be learned in the current course/grade level.	3/3
4.2d	Materials demonstrate coherence at the lesson level by connecting students' prior knowledge of concepts and procedures from the current and prior grade level(s) to new mathematical knowledge and skills.	4/4

The materials demonstrate coherence across courses/grade bands through a logically sequenced and connected scope and sequence. Materials demonstrate coherence across units by explicitly connecting patterns, big ideas, and relationships between mathematical concepts. Materials demonstrate coherence across units by connecting the content and language learned in previous courses/grade levels and what will be learned in future courses/grade levels to the content to be learned in the current course/grade level. Materials demonstrate coherence at the lesson level by connecting students' prior knowledge of concepts and procedures from the current and prior grade level(s) to new mathematical knowledge and skills.

Evidence includes, but is not limited to:

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

- The materials contain an overview video that identifies four priority topics for grade 4 and demonstrates how specific topics build from content learned in the previous topic in the grade level and make connections with prior knowledge. The video guides priority topics embedded in and across units. The video sets expectations of what students in grade 3 should know by the end of the instructional year.
- The unit overview in the materials provides connections to previous grade-level lessons that connect to current learning and vertical alignment progression that shows content taught in each grade level connected to other grade levels.
- The materials include a scope and sequence for suggested prerequisite skills that scaffold to build coherence across grade levels. The instructional materials provide a pacing guide that demonstrates a logically sequenced lesson pacing. This document is provided for each unit in the teacher toolbox and connects learning across grade bands.
- The lesson progression shows how lessons build upon previously learned content in both the current and previous grade levels and how the units' content will prepare students for the following grade levels' lessons. The unit three lesson progression focuses on how multiplication lessons in grade 3 build upon lessons in both grades 2–3 and how the lessons in

the unit will build into lessons in grade 4. For example, in grade 2 students begin to add two-digit numbers, in grade 3 students add three-digit numbers, and in grade 4 students add whole numbers.

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

- The materials provide an understanding of content across grades document, which identifies lesson-connected learning across grade bands and gives insights into big ideas and lessons taught in previous grade levels and how the models and thinking in the previous grade level build into the current learning and next grade level. The resource provides insights into how the models and thinking in the current lesson are connected to past lessons. In grade 4, Unit 1 overview includes the learning progression which gives a brief overview of students using strategies based on place value to round numbers. In Lesson 1, students explore the concept that a digit in the ones place has 10 times the value it would have in the place to its right and later in grade 4, students will use place value concepts to compare and round multi-digit numbers.
- The materials include a scope and sequence for suggested skills that scaffold to build coherence, a priority topics overview video that demonstrates coherence and explicitly connects big ideas between units, and a structured chart with an overview of how standards are organized with over-arching relationships in grades K–5.
- Within each lesson is a learning progression that identifies student learning “in previous lessons,” “in this lesson,” and “in the next lesson.” Within the progression, materials provide explanations of how the current learning relates to other grade-level content, which may be taught in the unit or other units. The learning progression of Lesson 16 in Unit 3 indicates that students will “use their knowledge of multiplication and division to apply the area formula” which connects to multiplication and its representations in Unit 2.

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 unit overview at the beginning of each unit identifies lesson-connected learning across grade bands. The materials vertically align and connect current content to concepts previously learned and to future learning. In grade 2 students begin to add two-digit numbers, in grade 3 students add three-digit numbers, and in grade 4 students add whole numbers.
- The materials provide coherence across units and grade levels by connecting current vocabulary to previously taught vocabulary and scaffolding learning across grade bands by connecting current vocabulary to language previously taught. Lesson 31’s vocabulary progression is categorized into “in the previous lesson,” “in this lesson,” and “in grade 4.” Within each content category, the content that supports the current lesson is explicitly explained, and the guidance suggests how students will use prior learning in the current lesson, and what the content will build into in the following lesson/unit/grade level.

- The teacher toolbox materials for each unit connect learning across grade bands. The document identifies insights into concepts and lessons taught in previous grade levels and demonstrates how the models and thinking in the previous grade level build into the current learning and learning that will be explored in the next grade level. Connected vocabulary from previous and future units and grade levels is bolded in the content examples.

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.

- At the lesson level, materials demonstrate coherence by building on prior knowledge and providing a learning progression that connects prior learning, current learning, and future learning. Each session within the instructional materials provides an opportunity for teachers to connect students’ prior knowledge of concepts and procedures from prior experiences to new mathematical knowledge and skills as well as vertical alignment progression that shows content taught in each grade level as it relates to the other grade levels.
- The instructional materials provide prerequisite interactive tutorials for students in the teacher toolbox, which supports students with a reminder of previous concepts learned so connections to new mathematical knowledge and skills can be made. Materials include suggested prerequisite skills that scaffold to build coherence within the lessons and across grade bands. Lesson 22, Session 1, provides connections for students to previous learning by prompting students to “use what you know to try to solve the problem below,” which supports students by connecting procedures and concepts to new learning.

Depth and Coherence of Key Concepts

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

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

Evidence includes, but is not limited to:

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

- The instructional materials provide spaced retrieval opportunities with previously learned skills and concepts at the end of each unit in the unit review, which offers a variety of questions from the concepts covered in each unit and applies the concepts and skills in a performance task.
- Each unit includes cumulative practice for students to show their understanding of previously learned content. The grade 4 Unit 4 cumulative practice contains questions that assess student understanding from multiple lessons in Units 1, 2, and 3 that provide retrieval opportunities with previously learned skills and concepts with a spiral review. The end of each unit concludes with a Math in Action resource where students apply their learning from the lessons within the unit. In Unit 4’s Math in Action assignment, students build fractions using unit fractions, compare fractions (Lesson 18), and find equivalent fractions (Lesson 17).
- The instructional materials reinforce math center activities and provide practice on current skills and concepts in addition to previously taught content. The refine section of the instructional materials in the teacher manual and student workbook allows retrieval opportunities for lessons within the unit.

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

- The materials provide spaced retrieval opportunities with previously learned skills and concepts across units and lessons with a cumulative review that provides a spiral review from the learning of the previous lessons and units. Session one of Lesson 14 provides an example of interleaved practice as students build upon their understanding of division to divide three-digit numbers. The connection to prior knowledge utilizes students’ prior knowledge about place value understanding. Opportunities throughout the unit allow students to strategize choices as they work.

- The materials provide interleaved practice opportunities of previously learned concepts and skills throughout the lessons and unit in a different context in the cumulative practice with varying tasks. For example, students identify a correct answer or apply the previously learned skill in a performance task with a much deeper understanding.
- Concepts are interleaved within units as students use knowledge from prior units and lessons in current instruction. In Lesson 16 of Unit 3, students use their understanding of addition (Unit 1) and multiplication (Unit 2) to solve for the areas of combined rectangles.
- Comprehension checks are digital versions of unit assessments available within each unit. The problems include questions from different lessons within the unit. The Unit 4 comprehension check includes questions mixed from Lessons 25–29.

Balance of Conceptual and Procedural Understanding

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

The questions and tasks in the instructional materials require students to interpret, analyze, and evaluate a variety of models and representations for mathematical concepts and situations. Questions and tasks in the instructional materials require students to create a variety of models to represent mathematical situations. Questions and tasks in the instructional materials 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.

- Lesson 4 of Unit 1 provides models and representations that students interpret, analyze, and evaluate through different tasks and question types. Students analyze and interpret a word problem, select a strategy to solve it, and lastly, explain the problem solution. In the Apply It section, students can analyze and interpret information to solve problems and evaluate using justification.
- Sessions 1–3 of Lesson 17 provide students with opportunities to interpret, analyze, and evaluate different pictorial models of fractions as they explore equivalent fractions. The resources utilize hands-on tools exclusively for differentiation and are not encouraged for all students.
- The interactive tutorial provides an opportunity for students to interpret, analyze, and evaluate pictorial models to find equivalent fractions.
- The materials show evidence of lessons that start with models and representations to build a conceptual understanding building from Explore and Develop to Apply It. In grade 4 students begin Unit 1 using place value charts in Lesson 1 to understand place value and the relationship between standard, word, and expanded forms, then explore in Lesson 3 with number lines to round whole numbers to build conceptual understanding.
- Within lessons, a variety of models and representations are presented that students will interpret, analyze, and evaluate within the scope of instruction. Some teacher guidance is provided in the margins of the teacher’s guide for facilitating students’ critical analysis of the models. Session 1 of Lesson 4 asks students to evaluate a variety of equal group models and

representations that show multiplication. The models demonstrate a representational model rather than a concrete model.

- Unit assessments (including mid-unit assessments) provide opportunities for students to interact with models in different ways. Questions about the models have students possibly interpret, analyze, and/or evaluate the models. Models in unit assessments and mid-unit assessments are representations of concrete models and/or numerical representations of pictorial models.
- Some lessons include suggested manipulatives and resources from the math toolkit for digital manipulatives or paper tools that students can use to develop their conceptual understanding of mathematical ideas by building concrete models. Guidance in the lessons suggests how to select and sequence the presentation of different student strategies that allow students to compare and connect different representations and models.

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

- Lesson 16 of Unit 3's Extension section provides a task requiring students to design a yard using the skills learned during the lesson and parameters given in the directions to demonstrate knowledge of area and perimeter.
- Lesson 14 of Unit 3 provides questions with a variety of models throughout the lesson given to students for analysis. Later in Session 3, students are expected to create a model using a ruler and grid paper to represent the area.
- Session 1 of Lesson 22 allows students to create a variety of examples for equivalent fractions and the Refine section in Lesson 17, Session 3 allows students opportunities to create a variety of models and equations to find equivalent fractions.
- Students explore different models and representations during the learning process. Within the lessons and included guidance, students try to solve using any approach, they analyze models and they solve problems. Students are encouraged to solve using what they learned or to draw a model but little evidence is found that requires students to create models to represent mathematical situations. Examples of possible models students could give are found in the teacher's guide, but there is no requirement to use these models. Some questions require students to create their own models. Session 2 of Lesson 6 has a question requiring students to draw a bar model and represent the situation with an equation.
- Some evidence can be found that tasks included in the units require students to use models to represent the situations presented in the task. In Lesson 16's enrichment activities, students are tasked with representing a situation presented in the task by drawing a design (model) on their recording sheet.

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

- Lesson 4 of Unit 1 provides questions and tasks throughout the lesson for students to apply conceptual understanding to new situations and contexts. In various sections of the lesson

(Apply It, Additional Practice, and Refine sections), students apply skills and strategies learned in the guided sections to the independent tasks and questions to complete on their own.

- Lesson 4 of Unit 1’s Extension section provides an opportunity for students to apply conceptual understanding to a new situation and context. Students create addition grids to solve addition problems that allow students to come up with their numbers to equal the given sum.
- The Refine section of Lesson 17, Session 3, provides opportunities for students to apply conceptual understanding to new problem situations. The tasks provided allow students to choose a representation they have learned to demonstrate understanding of the tasks. Some examples provided to the teacher include area models and equations to represent fractions.
- The Refine section of Lesson 20, Session 5 provides opportunities for students to apply conceptual understanding to new problem situations. The tasks provided allow students to choose a representation they have learned that demonstrates understanding of the tasks. Some examples provided to the teacher include pictorial models, number lines, and equations to represent fractions.
- Reflection opportunities are within the sessions of lessons with questions or prompts that have students interact with the learning in a different way than previously taught. In Lesson 4, Session 1, the question asks, “Would the sum be the same whether you drew a picture, lined up by place value to add, or used another strategy?” Within these reflection questions/activities, students are asked to explain, justify, analyze, etc. in a way that is different from what they immediately experienced in the lesson.
- Each lesson includes an enrichment activity that provides a task to interact with the learning from the lesson in a different way that allows students to apply their understanding of the content in a new way. In Lesson 25, the students apply their understanding of fractions written as tenths and hundredths. Students then analyze and explain their problem-solving approach in the second question.
- At the end of each unit, a literacy connection is provided that has students solve problems based on a cross-curricular reading passage. In Unit 4, students read a science passage based on gold and then answer questions based on the passage where they find equivalent fractions and justify their answers.

Balance of Conceptual and Procedural Understanding

5.2	Development of Fluency	10/12
5.2a	Materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level tasks.	2/2
5.2b	Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within the lesson and/or throughout a unit.	3/3
5.2c	Materials provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson and throughout a unit.	4/6
5.2d	Materials contain embedded supports for teachers to guide students toward increasingly efficient approaches.	1/1

The materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level tasks. Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within the lesson and/or throughout a unit. Materials provide opportunities for students to evaluate procedures and processes for efficiency and flexibility within the lesson and throughout a unit. The materials do not include opportunities for students to evaluate accuracy procedures, processes, and solutions is absent within the instructional materials. 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.

- Unit 1, Lesson 4, Session 2, Additional Practice section contains fluency and skills practice that provides practice using different strategies to build fluency. Unit 1, Lesson 1, Interactive Tutorials Place Value, Part One provides interactive practice to build fluency. Students use standard form, word form, and expanded form to read and write four-digit numbers and identify the value of a digit based on its position to build fluency.
- Lessons contain fluency and skills practice that suggest different activities students can use to practice their fluency and include suggestions for paper resources, digital learning games, interactive practice, cumulative practice, and i-Ready personalized instruction.
- Within the resources of each lesson are fluency and skills practice resources that have students practice current content to develop their fluency and automaticity. Students analyze and solve using different problem-solving approaches.
- Lessons include a digital interactive practice that gives guidance on using strategies explored in the content and applying them to solving problems. The interactive practices support students in fluency and automaticity by providing structured support, allowing students to explore, make sense of, and develop problem-solving strategies.

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 additional practice in the teacher manual allows opportunities for students to practice the application of skills learned within the lesson. Tasks lead to one correct solution with an opportunity to check for reasonableness, the ability to explain the solution, and the use of multiple strategies to solve problems. This allows for flexible and accurate mathematical practice within the unit.
- The cumulative practice found at the beginning of each unit in the teacher toolbox provides an opportunity for students to practice mathematical procedures learned throughout the unit.
- Lessons contain fluency and skills practice suggesting different digital learning games. The demo accounts allow the reviewer to see the component, but all games link to the same demonstration game of fluency with representations of numbers for 10 and below.
- Within the sessions of a lesson, the differentiation component provides teachers with additional instructional guidance to support and reinforce students' learning of new content efficiently and accurately. In Session 1 of Lesson 5, differentiation has teachers guide students to complete a hands-on visual model to deepen their conceptual understanding of subtraction with regrouping.
- The beginning of each unit includes a cumulative practice. This practice includes sets of questions addressing different previously learned content to allow students to practice problem-solving using procedures learned during different lessons and across units.

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

- The questioning within the instructional materials does not offer students the opportunity to fully engage in the criteria of the indicator. Opportunities for students to evaluate the accuracy of problem-solving are not present. For example, no guidance prompts teachers to ask students to prove and justify their answers, such as whether or not their estimate is accurate and what they might do differently next time.
- The Try It, Discuss It, and Connect It instructional routines within the instructional materials help students build efficiency and flexibility within the lessons and throughout a unit. Each section builds students' understanding and toolbox to solve problems. Students evaluate procedures and processes as they learn mathematical strategies.
- In the Connect It section of Lesson 5, Session 2, students evaluate procedures, processes, and solutions. This example does not prompt students to communicate about a solution's efficiency, the flexibility of multiple strategies, or the accuracy of the lesson. In Question 6, the resource asks students, "Which models or strategies do you like best for subtracting four-digit numbers?" Re-wording to include language about efficiency, flexibility, and accuracy within the questions provided would better support this indicator.
- The Develop section of the instructional resource provides opportunities for students to evaluate procedures, processes, and solutions as they align with mathematical procedures, processes, and concepts, but questioning does not prompt students to discuss efficiency,

flexibility, and accuracy. Examples provided to teachers to listen for this language and questions worded to reflect the language in the indicator would ensure the language of the indicator is being utilized by teachers and students.

- Within lessons, suggested questioning has students evaluate problem-solving methods. Students may be asked to either evaluate solution paths presented in the lesson (Model It or Picture It) or those presented by other students (Try It), which supports students' flexibility and efficiency as they evaluate other presented solution paths.
- The Math in Action lessons include opportunities for students to evaluate the solution of a fictitious student. The Unit 2, Math in Action lesson has students evaluate "G.O.'s" thinking path and solution. Students are then asked to try another approach to follow up the exemplar. The Math in Action lessons conclude a unit to allow students to use what they have learned within the unit to evaluate different procedures and solutions from the unit.
- Within the Refine lessons is an example section, which uses questions for students to look at the thinking and solution of a fictitious student to analyze their solution. Students evaluate another student's work to develop their flexibility and efficiency with solving.

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

- Each unit includes a Unit Flow and Progression video. This video provides insights into different problem-solving approaches used in the lessons. The guidance supports teachers in making connections to support students in moving from concrete experiences to more efficient problem-solving approaches.
- Each unit includes a presentation to support understanding across grade levels. This presentation provides insights into the sequence of learning from the previous grade level, the current grade level, and the future grade level. The guidance supports teachers in making connections to support students in moving from concrete experiences to more efficient approaches that build upon their past learning and connect to their future learning.
- Within lesson sessions is an instructional component called Connect It that guides teachers on how to support students in making connections between problem-solving approaches they have learned with other problem-solving approaches that may be more efficient or accessible. In Lesson 5, Session 1, the guidance provides connections between decomposing numbers and regrouping when subtracting so students understand the notation used in the traditional standard algorithm.

Balance of Conceptual and Procedural Understanding

5.3	Balance of Conceptual Understanding and Procedural Fluency	9/16
5.3a	Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed.	1/2
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 explicitly state how the conceptual emphasis of the TEKS are addressed. Materials do not explicitly state how the procedural emphasis of the TEKS are addressed. Questions and tasks include the use of pictorial representation (figures/drawings), and abstract representations for differentiation purposes. The materials do not include the use of manipulatives and concrete models to compare to abstract representations. Materials include supports for students in connecting, creating, defining, and explaining representational models to abstract (symbolic/numeric/algorithmic) concepts. The materials do not include supports for students in connecting, creating, defining, and explaining, concrete models to abstract concepts.

Evidence includes, but is not limited to:

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

- The Lesson 1 Overview Learning Progression section provides information about concepts and procedures in the unit. In the Lesson 1 progression, students extend their understanding of place value by exploring the concept that a digit in one place has 10 times the value it would have in the place to its right. In each session, students will focus on one strategy.
- The instructional materials include a Unit Flow and Progression video at the beginning of each unit that highlights key concepts and skills students learn in the unit; however, the materials do not include clear and explicit learning objectives that state explicitly how the conceptual and procedural emphasis of the TEKS are addressed.
- The Lesson 3 learning progression states that students will use place value to build an understanding of the standard algorithm for subtraction as they develop fluency in grade 4. These concepts and procedures align with the TEKS, but no TEKS are explicitly stated.
- The lesson overview contains a bulleted list of content objectives that are addressed through the sessions of the lessons. These objectives align with the concepts from the TEKS, but no TEKS are explicitly stated.

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

- Lesson 17, Sessions 1–3 of the instructional resource, provides students with opportunities to interpret, analyze, and evaluate different pictorial models of fractions as they explore equivalent fractions. The instructional materials utilize hands-on tools exclusively for differentiation and are not encouraged for all students to utilize concrete tools to explore equivalent fractions.
- The materials provided in the teacher toolbox for each lesson do not contain explicit instructions for students to utilize or practice building conceptual understanding through the use of concrete models. The materials provided within the tools for instruction, math center activities, and enrichment activities rely on pictorial models or abstract representations for questions and tasks.
- Lessons include pictorial representations and abstract representations of mathematical tasks along with instructional guidance, questioning, and “listen for” that support teachers through instruction. Concrete models (including manipulatives) are referenced in the teacher’s guide as either a resource in the teacher toolbox to use when solving, in the guidance for select and sequence student strategies, or as differentiated instruction. It is not evident that the instructional questions and tasks consistently use concrete models (manipulatives) within the instruction for all students.
- Questions and tasks within the resources focus on pictorial representations and abstract symbolic representations. Concrete models (including manipulatives) are used as either a suggested tool or a differentiation resource. In Lesson 19, students in grade 4 are introduced to adding fractions with like denominators. Session 1 introduces the concept with questions about pictorial models and symbolic representations, but no concrete models are referenced in the instruction.
- Questions and tasks within the resources focus on pictorial representations and abstract symbolic representations. Concrete models (including manipulatives) are used as either a suggested tool or a differentiation resource. In Lesson 12, students in grade 4 are introduced to multiplication with two-digit numbers. Session 1 includes differentiation for reteaching or reinforcing students “who are unsure of multiplying a two-digit number by another two-digit number” by using base-ten blocks. The expectation for concrete models to be used within problems and tasks is not consistent across lessons and sessions.

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

- Lesson 5, Session 1 of the instructional materials guide for teachers to select and sequence student strategies with concrete tools, representations, and abstract representations. The materials suggest for the teacher to “guide students to compare and connect the representations.” The resource gives specific suggestions for students to compare the models used. The materials are explicit in students connecting models, but specific guidance on supporting students with connecting concrete tools, pictorial representations, and abstract representations is not specifically stated within this lesson.

- The hands-on activity in Lesson 5, Session 2 within the teacher manual provides students an opportunity to use concrete tools, base-ten blocks, and a place-value chart for students to work with a partner. One partner represents a value with base-ten blocks and one partner represents using a place-value chart. The partners then compare the results. Students are comparing results, but there is no specific guidance for teachers to prompt students to make connections between the concrete tool and the abstract representation. This activity is suggested as differentiation to extend learning, and therefore, it is inferred that this experience would not be provided to all students.
- The materials support students in both analyzing and making sense of representation models and connecting them to more abstract representations of the concept. The Picture It, Model It, and Connect It components have students look at representations in a variety of ways so they can be connected to the overarching concept.
- The Math in Action lessons have students look at representations presented by fictitious students and make connections with the presented representation and more abstract representations of the content.
- Materials guide teachers in the use of concrete manipulatives and representing the manipulatives. There is no evidence that the materials provide support for students to use manipulatives and connect the manipulatives to more abstract representations of the content.

Balance of Conceptual and Procedural Understanding

5.4	Development of Academic Mathematical Language	14/14
5.4a	Materials provide opportunities for students to develop their academic mathematical language using visuals, manipulatives, and other language development strategies.	3/3
5.4b	Materials include embedded guidance for the teacher addressing scaffolding and supporting student development and use of academic mathematical vocabulary in context.	2/2
5.4c	Materials include embedded guidance for the teacher to support the application of appropriate mathematical language to include vocabulary, syntax, and discourse to include guidance to support mathematical conversations that provide opportunities for students to hear, refine, and use math language with peers and develop their math language toolkit over time as well as guide teachers to support student responses using exemplar responses to questions and tasks.	9/9

The materials provide opportunities for students to develop their academic mathematical language using visuals, manipulatives, and other language development strategies. Materials include embedded guidance for the teacher addressing scaffolding and supporting student development and use of academic mathematical vocabulary in context. Materials include embedded guidance for the teacher to support the application of appropriate mathematical language to include vocabulary, syntax, and discourse to include guidance to support mathematical conversations that provide opportunities for students to hear, refine, and use math language with peers and develop their math language toolkit over time as well as guide teachers to support student responses using exemplar responses to questions and tasks.

Evidence includes, but is not limited to:

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

- Each lesson in the material provides the math and academic vocabulary introduced in the lesson and specific key terms to review and provides multiple opportunities throughout the lessons and sessions for students to read, write, and speak this vocabulary. Lesson 2 of Unit 1’s overview provides academic and math vocabulary introduced in the lesson and includes opportunities for students to read, write, and speak about vocabulary in each session. Lesson 18, Session 1 of the instructional materials provides opportunities for students to develop academic mathematical language using visuals and other language development strategies. In this example, students are to “use what they know about the meaning of the term *common denominator* based on what they know about the words *common...* and *denominator.*”
- The materials provide opportunities for students to develop their academic mathematical language using graphic organizers throughout the lessons to create visuals, models, equations, and words to build examples and non-examples of vocabulary and connect them to grade-level content. Lessons in Unit 4 support students’ development of fraction

vocabulary. Lesson 2 of Unit 1 guides students to complete a graphic organizer using words, numbers, and pictures to develop mathematical language.

- The instructional materials offer lessons that include differentiation guidance to reteach or reinforce lessons. This component provides teachers instruction to guide students in representing mathematical situations, frequently with concrete manipulatives. The included guidance suggests questioning and possible answers as academic vocabulary is connected to the instruction and discussion.
- Lessons include instructional components (Picture It and Model It) that have students analyze mathematical models and visuals. The guidance provided in the teacher’s guide includes questions, student comments or questions to listen for, and prompts for students to interact with the learning using the included visuals and mathematical vocabulary in meaningful situations.
- Within lessons is a language routine focused on developing both content and academic vocabulary. In Lesson 8, Session 2, the guidance included in the routine reinforces the phrase *given number*.

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

- Lesson 18, Session 2 in the teacher manual of the instructional materials provides an example of embedded guidance for the teacher to support vocabulary development. The development of the academic language section provides embedded guidance for the teacher supporting student vocabulary development and use of academic mathematical vocabulary in context. The example sentence stems include, “My strategy has ____, and your strategy has ____.” and “Both of our strategies ____.”
- The materials include embedded guidance for the teacher to support vocabulary development through graphic organizers with clarifying examples and non-examples and reflecting on the meaning of the mathematical vocabulary. The teacher manual provides lesson notes for building vocabulary in Unit 4 which provides embedded guidance for teachers to support student development and use of academic mathematical vocabulary.
- Lessons include guidance in the Try It component of the instructional materials that support teachers in scaffolding students to make sense of the problem by using co-craft questions. In Lesson 2, Session 2 the guidance says that teachers should use the questions to “help students make sense of the problem.”
- Sentence starters are provided in the teacher’s guide, and have suggestions to be used within a mathematical discussion to provide students a framework to discuss mathematical situations using their academic vocabulary.

Materials include embedded guidance for the teacher to support the application of appropriate mathematical language to include vocabulary, syntax, and discourse to include guidance to support mathematical conversations that provide opportunities for students to hear, refine, and use math language with peers and develop their math language toolkit over time as well as guide teachers to support student responses using exemplar responses to questions and tasks.

- The instructional materials include lesson overviews that highlight vocabulary developed within the lesson, identify vocabulary to review from prior learning, and include content and language objectives to support the application of appropriate mathematical language. The overview in Unit 1, Lesson 2 provides academic and math vocabulary introduced in the lesson and reviews from prior knowledge to support the application of appropriate mathematical language.
- Lesson 18, Session 2 in the teacher manual of the instructional materials provides an example of embedded guidance for teachers to support the application of appropriate mathematical language. The discussion section of the resource has specific mathematical language such as, “Encourage students to use the terms *tenths* and *hundredths* as they discuss their solutions.” In facilitating whole class discussion, the resource guides listening to student responses to include, “area models divided into 100 equal parts with 2 parts shaded and into 10 equal parts with 8 parts shaded and that both models are the same size.”
- Throughout Lesson 18, students have an opportunity for student discourse that supports deeper mathematical understanding through partner discussions, class discussion, and responding to questions and tasks embedded in the student workbook. Through these opportunities, students hear, refine, and use math language with peers and develop their math language toolkit over time.
- The teacher’s guide includes vocabulary and language supports that guide teachers in facilitating and assessing students’ use of language both in partner and in whole-class mathematical discussions. Within the instruction of Lesson 7, Session 2 is guidance that supports the development of vocabulary terms (develop academic vocabulary), guidance on supporting partner discussions with both written and oral questioning (support partner discussions), and guidance on facilitating a whole group discourse (facilitating whole class discussion) with suggested questions to ask and student responses to listen for.
- The instructional component for language development (develop academic language) includes language development that supports students with vocabulary development and usage and also the language used in mathematical discourse. In Lesson 7, Session 3, the language routine scaffolds students as they “agree and build on the ideas of others.” The guidance includes the usage of clarifying a word or phrase and provides sentence frames to reference during mathematical discourse.

Balance of Conceptual and Procedural Understanding

5.5	Process Standards Connections	4/6
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.	1/2
5.5c	Materials include a description for each unit of how process standards are incorporated and connected throughout the unit.	1/2
5.5d	Materials include an overview of the process standards incorporated into each lesson.	1/1

Process standards are integrated appropriately into the materials. Materials include a description of how process standards are incorporated. Materials do not include a description of how process standards are connected throughout the course. Materials include a description for each unit of how process standards are incorporated throughout the unit. Materials do not include a description for each unit of how process standards are connected throughout the unit. Materials include an overview of the process standards incorporated into each lesson.

Evidence includes, but is not limited to:

Process standards are integrated appropriately into the materials.

- The materials include a correlation chart document that shows TEKS coverage in the materials, including process standards. The “Ready Texas Mathematics Instruction” column demonstrates that the process standards are incorporated into all lessons.
- The Ready Texas materials include a “Mathematical Process Standards in the TEKS” document to demonstrate how the process standards are integrated into the materials, including the “Mathematical Process Standards (MPS) Tips” callouts in the materials that highlight “. . . special opportunities to reinforce the habits of mind that the Process Standards represent.”
- Each lesson provides a note at the bottom of the lesson introduction which highlights the specific process standards that are the focus of the lesson, though in many cases other process standards can also be connected.
- Unit 1, Lesson 1 provides opportunities for students to appropriately utilize process standards as students are presented with a real-world connection where they can select tools, communicate mathematical ideas, use a problem-solving model, analyze relationships, and explain and justify thinking.
- Within a session, the process standards are integrated into the instructional components. In Lesson 18, Session 1, students are presented with a real-world problem. Through the discourse questions, students explain their problem-solving model. Students use tools from the suggested math toolkit items as they record their thinking on the record sheet using symbols, words, and pictures to explain their thinking.

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

- The "Teacher Toolkit" includes "Answering the Demands of the TEKS with Ready Texas Mathematics," a resource that describes how the academic and process standards are incorporated throughout the course and how the process standards support student learning of the content standards. There is no evidence of how process standards are connected throughout the course.
- Within lessons, the Try-Discuss-Connect Framework “incorporates multiple routines and best practices into instruction, while integrating language and mathematics to develop deeper understanding.” This framework supports students in making sense of problems, sharing their thinking through mathematical discourse, making connections, and reflecting on what they have learned. The TEKS process standards can be found in the framework; however, there is no description of how the process standards are connected in the course.
- The materials include “MPS Tips” throughout the materials that describe how process standards are incorporated into the course. For example, in Unit 2, Lesson 13, the tip callout asks the teacher to continually “encourage students to explain and justify” their mathematical ideas.

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

- The "Teacher Toolkit" includes "Answering the Demands of the TEKS with Ready Texas Mathematics," a resource that describes how the academic and process standards are incorporated in the unit. It discusses how the process standards support student learning of the content standards. There is no evidence of how the process standards connect throughout the unit.
- Each "Lesson Overview" lists which "Standards of Mathematical Practice (SMP)" process standards are embedded in each series of lessons within a unit. Listed MPSs make connections to student engagement protocols throughout the lesson's instructional framework routine. There is no description of how process skills connect throughout the unit.
- Materials provide a grade 4 TEKS correlation guide to show where each process standard is embedded within the overall course, including the units. Within the teacher's guide table of contents, lessons in each unit are listed along with the MPSs embedded within each unit.

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

- The materials include a TEKS integration document that indicates the process standards identification numbers, the component that covers it, the page number, and the lesson reference.
- Each lesson provides a note at the bottom of the lesson introduction which highlights the specific process standards that are the focus of the lesson, though in many cases other process standards can also be connected.

- The teacher’s guide overview includes an explanation of each of the components found in the different types of lessons located within a unit (Explore, Develop, Refine). The process standards are embedded within the explanation of the components. For example, 3.1G is embedded into the develop academic language component found in many explore and develop lessons.
- The materials include a TEKS integration document that indicates the process standards identification numbers, the component that covers it, the page number, and the lesson reference.

Productive Struggle

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

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

Evidence includes, but is not limited to:

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

- Each unit concludes with a Math in Action lesson that includes instructional sessions. The sessions include mathematical tasks or problems where students can both analyze the solution path of a fictitious student and solve the problem. The tasks include a problem-solving checklist to support students in persevering through problem-solving as they work toward a solution.
- Many lessons in the materials include an Explore opportunity within session one or session two of the lesson. In grade 4, Lesson 6, Session 1, students explore multiplication through a Try It activity where they work to solve a mathematical problem before modeled instruction. This activity includes guidance for students to use the Three Reads strategy to support them in making sense of the mathematics problem and then responding to discussion questions with a partner. The guidance includes information on common student misconceptions and questions teachers can ask to probe student understanding.
- Session 1 of each lesson concludes with an additional practice resource. This practice includes opportunities for students to show their understanding of the content in multiple ways. Guidance in the teacher’s guide includes suggested reminders that teachers can offer students as they explore the content in a new way. The problem notes contain guidance on supporting students as they solve the problem. Lesson 16, Session 1 includes teacher guidance that states, “suggest that students say it another way to clarify the problem,” and includes suggested questions students can ask themselves as they make sense of the problem.

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

- Materials support students in understanding that there can be multiple ways to solve problems and complete tasks. Each lesson includes an enrichment activity where students extend their learning of the content. These open tasks allow students to solve the problems presented in the tasks in various ways. For example, students receive clues to a mystery number in a specific task. They determine the mystery number and other possible solutions that meet the clues.
- Units conclude with a Math in Action lesson where students are presented with a math task and asked to find a possible solution. Students also have the opportunity to analyze the solution path of a fictitious student. In Unit 4, Math in Action, Session 1, students read through Luna’s solution and analyze the solution through a facilitated whole class discussion.
- The instructional components of the Try-Discuss-Connect Framework embedded within a session provide students with opportunities to solve a problem in a way that works for them in the Try It component, where they also discuss their solutions and the solutions of others. Students explore different ways of problem-solving when they analyze and justify other solving methods found within the session and then justify their solving approaches in the application component of the lesson.

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

- Instructional sessions conclude with a reflection component where students write about the learning associated with the session. The teacher’s guide regularly suggests that teachers should have “students share their preferences with a partner.” The reflection question in Lesson 4, Session 1 allows students to write about math in a way that communicates understanding to the teacher.
- Within an instructional session of a lesson are opportunities for differentiation with reteach and reinforce instructional support. The materials provide teachers guidance to support students struggling with the current content. This instructional component allows teachers and students to work through problems and discuss mathematical relationships.
- Within the Try It component of sessions, different sense-making routines are referenced that students can use individually or with a partner to make sense of math. The user guide contains explicitly outlined routines with suggested directions that they “be used by all students as they access mathematical concepts and their growing mathematical understanding.”

Productive Struggle

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

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

Evidence includes, but is not limited to:

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

- Most lessons start with an instructional session and present students with a problem in the Try It section before instruction, where they use what they know to solve. Within the component are opportunities for students to share, explain, discuss, and question others about their problem-solving approaches in the Discussion section. The materials provide teacher guidance with suggested questioning to probe student thinking and specific understandings for teachers to “listen for” as students explain, discuss, and justify their problem-solving approaches.
- The materials include reteaching materials for each lesson and tools for instruction. These lessons include step-by-step instructions for teachers to help increase students’ understanding and provide guidance on how to have students estimate and check their answers. The mini-lesson concludes with a check for understanding, where students are asked to solve and explain the steps they took to find their answer. Additionally, the lessons provide teacher guidance and support to formatively assess student understanding and instructional feedback to help support students’ needs.
- Each unit concludes with a Math in Action lesson. The sessions within the lesson include tasks for students to work through and teacher guidance on having students discuss and explain their problem-solving process. Facilitation questions for whole class discussions support teachers in having students explain and justify their thinking or the thinking of others through the different parts of their problem-solving process. The materials also provide teacher guidance to support students as they share their thinking and discuss different problem-solving approaches.

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

- The lessons in the instructional materials provide a Common Misconceptions section within each session that explains anticipated common misconceptions and includes support teachers can use to address misconceptions. Lesson 2, Session 2 guides and supports teachers in prompting students to check their explanations for the problem. In Lesson 8, Session 3, the resource provides a common misconception for the teacher at the beginning and in the Close section of the lesson. The prompts guide teachers on what to listen for in student responses.
- The culmination of each unit includes a review with questions at varying depths of knowledge levels and a performance task. The assessments include rationales for answer choices and the correct or possible answers, teacher guidance on implementing the performance task, scoring rubrics, and suggested activities for students to continue practicing or extending the content.
- The Understanding Content Across Grades presentation provides insights into what students previously learned, current learning, and future learning. The materials include common error insights and provide teacher guidance on supporting students to correct errors before they create misconceptions.