

### IXL Learning, Inc.

Supplemental English Mathematics, 6 IXL Math Grade 6

Supplemental	9781947569355	Digital	Adaptive
MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC

#### **Rating Overview**

TEKS SCORE	TEKS BREAKOUTS	ERROR CORRECTIONS	SUITABILITY	SUITABILITY	PUBLIC FEEDBACK
	ATTEMPTED	(IMRA Reviewers)	NONCOMPLIANCE	EXCELLENCE	(COUNT)
100%	204	0	Flags Not in Report	Not Applicable	0

#### **Quality Rubric Section**

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	13 out of 21	62%
2. Progress Monitoring	19 out of 23	83%
3. Supports for All Learners	28 out of 37	76%
4. Depth and Coherence of Key Concepts	11 out of 16	69%
5. Balance of Conceptual and Procedural Understanding	33 out of 38	87%
6. <u>Productive Struggle</u>	19 out of 21	90%

### Breakdown by Suitability Noncompliance and Excellence Categories

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

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

### **IMRA Quality Report**

### 1. Intentional Instructional Design

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

#### 1.1 Course-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.1a	The materials do not provide an alignment guide for the English Language Proficiency Standards (ELPS) or a teacher rationale regarding vertical and horizontal alignment.	2/5
1.1b	All criteria for guidance met.	3/3
1.1c	All criteria for guidance met.	2/2
1.1d	The materials do not include explicit teacher guidance for unit internalization.	1/2
1.1e	All criteria for guidance met.	2/2
_	TOTAL	10/14

## 1.1a – Materials include an alignment guide outlining the TEKS, ELPS, and concepts covered, with a rationale for learning paths across grade levels (vertical alignment) and within the same grade level (horizontal alignment) as designed in the materials.

The materials do not include an alignment guide for the ELPS or an educator rationale for horizontal or vertical alignment within the learning paths. The IXL "TEKS Skill Plan" provides a list of Texas Essential Knowledge and Skills (TEKS) and outlines the key concepts and TEKS covered. Materials also include content support, such as videos and exercises, that are integrated into the lessons and aligned with the TEKS. For example, grade 6 "Numbers and Operations 2–3" contains an outline of the mathematical process standards 6.2A–E.

The "TEKS Skill Guide" contains a list of all TEKS, skills, and lessons taught in grade 6. The "Weekly Plans" contains section lists. The "Skill Plans" include links to other grade levels on the left-hand side of the screen. For example, an educator could click on a grade 6 linear equations lesson as well as multiple grade levels to see videos, lessons, and hints on how linear equations are aligned across grade levels. The IXL "Math Curriculum" provides an outline of the course of study within the grade level and explains how concepts build in complexity across grade levels. For instance, an educator can scroll within the grade 6 skill plan and view the linear equation lessons and how they progress in complexity within the grade 6 learning paths. Students complete problems on a diagnostic, which provides an entry point to TEKS across and within grade levels. As they progress through the questions, the materials adapt further across grade levels or within the same grade level.

## 1.1b – Materials include an implementation guide with usage recommendations and strategies for effective educator use, such as just-in-time supports, advanced learning, or as a course.

The "Implementation Guides" provide recommendations and strategies for implementing and embedding IXL in their classrooms to meet student needs within different contexts. The materials include a comprehensive "Teacher's User Guide" that provides usage recommendations and strategies for effective use by educators. The "Teacher's User Guide" addresses daily instruction, core curriculum support, diagnostic assessments, standards preparation, personalized practice, whole-class instruction, live assessments, and unit assessments. For example, within "IXL for Daily Instruction," educators can watch a video or read a PDF that provides step-by-step guidance on implementing and reinforcing lessons to help students retain instruction.

The materials include guidance for planning lessons, delivering instruction, and using formative assessment. Resources also offer strategies for adapting instruction to meet diverse student needs, including intervention tools for struggling learners, and recommendations for extending learning for advanced students.

## 1.1c - Materials include a TEKS correlation guide with recommended skill entry points based on diagnostic assessment results.

The materials include a TEKS-based correlation guide and recommend skill entry points based on diagnostic data. The IXL "Diagnostic Action Plan" provides TEKS-based recommended skill entry points based on student diagnostic assessment results. Materials recommend individualized skills for students based on their IXL Diagnostic, which is an adaptive placement tool that assesses students' current understanding and recommends personalized skill entry points called a "Diagnostic Action Plan." Materials place students at their entry level point within the skill sequence or grade level band for a topic.

The IXL "Diagnostic Hub" offers guidance and recommendations for using and assigning IXL Diagnostic tools and assessments. For instance, teachers can view real-time feedback from the reports, see their students' personalized "Diagnostic Action Plan," manually adjust skill entry points, and assign lessons based on diagnostic results and individual student needs.

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

The materials include guidance for internalizing skills and lessons; however, they do not include explicit teacher guidance for unit internalization. The "Implementation Guides" support daily lesson instruction and internalization, protocols, and step-by-step directions for internalizing unit overviews and lessons through e-learning videos. For instance, the materials provide asynchronous training modules and videos that guide educators through lesson internalization, offering checkpoints to pause and reflect on key

elements. Educators can set student goals, plan the next steps, address student misconceptions, and get recommendations for opportunities for differentiation.

The materials include "IXL for Unit Assessment," a unit assessment guide that gives guidance on student proficiency across multiple skills and standards at the end of a unit. Educators can assign checkpoints, set student goals, and plan the next steps, but they do not provide protocols with guidance for internalizing the unit.

## 1.1e - Materials include resources and guidance for instructional leaders to support educators with implementing the materials as designed.

The "Administrator Guide," located within the "Administrator's Hub," provides resources that help instructional leaders support educators in implementing the materials as designed. For example, the "IXL for Daily Instruction and Planning" guide includes a step-by-step approach for administrators to support teachers in lesson planning and progress tracking.

The IXL eLearning Library offers leader-specific training modules, webinars, and documents designed to support implementation leadership across a campus or district. The IXL eLearning Library also includes resources intended to support the onboarding process for new teachers. For example, leaders can create a professional development session that explains how to analyze diagnostic data and get started with real-time diagnostics, and instructional coaches can use videos to support educators in implementing the materials as designed.

#### 1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	This guidance is not applicable to the program.	N/A
1.2b	Materials do not include detailed overviews, suggested time frames, or assessment resources aligned with the ELPS.	1/5
1.2c	All criteria for guidance met.	2/2
_	TOTAL	3/7

## 1.2a – If designed to be static, materials include detailed lesson plans with learning objectives, teacher and student materials, lesson components with suggested timeframes, and assessment resources aligned with the TEKS and ELPS.

This guidance is not applicable because the program is not designed to be static.

## 1.2b – If designed to be adaptive, materials include detailed lesson overviews with learning objectives, lesson components with suggested timeframes, and assessment resources aligned with the TEKS and ELPS.

Lesson components incorporate blended models, competency-based learning, and mastery-based learning with videos, adaptive exercises, and TEKS-aligned assessments. The materials provide weekly program usage guidance but do not include detailed overviews and suggested pacing for individual lesson components.

Materials include TEKS-aligned embedded assessments or "Quizzes," such as mastery checks at the end of learning pathways, assessment data from the IXL "Diagnostic," and checkpoint performances. Each assessment adapts to student progress, enabling educators to gauge student understanding at various levels and adjust tasks in real-time to provide targeted support or enrichment.

The materials do not address the ELPS within the learning objectives or assessment resources.

### 1.2c - Materials contain support for families in Spanish and English for each unit, with suggestions on supporting the progress of their student(s).

The "Communicate with Parents" section offers guidance and handouts for schools to communicate and share resources with families. The IXL "Parent Guide" provides families with an overview of the IXL program and explains how they can support learning at home, while the IXL "Parent Analytics Guide" offers suggestions and instructions to help parents stay informed about their student's learning. For example, families can log in to their child's IXL account and click "Analytics" to monitor their student's progress and support them with lessons and skills. The "Parent Guide" and the "Parent Analytics Guide" are available in Spanish and English.

Materials include a printable parent letter, handouts with student login information, and information guides families in logging into IXL from home. The "Parent Handout" explains how to access the program, support student learning, and monitor academic performance, all while providing families with clear and objective information about their child's progress.

### 2. Progress Monitoring

Materials support educators in effective implementation through frequent, strategic opportunities to monitor and respond to student progress.

#### 2.1 Instructional Assessments

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.1a	Materials do not include an alignment guide for the ELPS, or a rationale for	2/2
	vertical and horizontal alignment.	
2.1b	All criteria for guidance met.	2/2
2.1c	The materials do not include content and language supports, or calculators	2/4
2.10	that educators can enable or disable to support individual students.	
2.1d	All criteria for guidance met.	4/4
2.1e	All criteria for guidance met.	4/4
_	TOTAL	14/16

### 2.1a – Materials include the definition and intended purpose for the types of instructional assessments.

The IXL "Analytics" section includes videos with clear definitions and intended purpose for types of instructional assessments, such as diagnostic, formative, and summative assessments. The materials include examples and guidance that demonstrate how to utilize IXL assessments and assessment data for effective instruction. For example, the IXL "Diagnostic" identifies students' strengths and gaps in skills, recommending targeted practice through personalized learning plans, known as a "Diagnostic Action Plan."

The materials include formative assessments within each lesson as well as summative assessments embedded at the end of units. Teachers can create assessments, such as quizzes, exit tickets, and other activities, using the IXL "Quizzes" feature. Materials include guidance on how to review results and identify grade-level proficiency in key standards, as well as suggestions on how to utilize assessment data and recommendations for practice. For instance, teachers may use quiz data to assign lessons or to create warm-ups over frequently missed questions or topics of choice.

### 2.1b – Materials include guidance to ensure consistent and accurate administration of instructional assessments.

The "Implementation Guides" give teachers and administrators a clear, step-by-step guide on how to ensure consistency and accuracy while administering instructional assessments. For example, IXL recommends administering the IXL "Diagnostic" in approximately 45 minutes per subject. Teachers have the flexibility to spread the assessment over multiple sessions, allowing students to complete it in shorter timeframes across different days or class periods. The materials include administrator tools that allow

them to control testing windows, ensuring assessments align with campus testing schedules and the fidelity of implementation.

The "Teacher's User Guide" located within the "Diagnostic Hub" offers guidance for teachers to assess their students' grade-level proficiency and provides insights on how to review diagnostic scores and plan for updating and maintaining consistent diagnostic data throughout the year.

## 2.1c – Digital assessments include printable versions and accommodations, including text-to-speech, content and language supports, and calculators, that educators can enable or disable to support individual students.

The IXL eLearning Library includes guidance for teachers on how to print custom-created quizzes, warm-ups, and formative end-of-unit assessments. However, all other assessments and assessment tools are not printable due to their interactive and responsive nature.

The IXL "Profile and Settings" feature allows educators to customize some accommodations for individual students, a group of students, or multiple classes; however, there is no content and language support or calculators that can be turned on or off for individual students. Accommodations include turning text-to-speech on or off, setting individualized goals, adding or removing countdown timers, hiding grade levels on lessons, and hiding or enabling the scratch pad option. The materials also offer educators the ability to toggle language translation for over 90 languages. For example, IXL provides teachers with the ability to assign text-to-speech support, which allows students to hear questions read aloud by clicking a speaker icon within the lessons. Although the materials include translation support, they do not include content and language support.

## 2.1d – Materials include diagnostic assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels.

The "IXL TEKS Skill Plan" and the IXL "Diagnostic" include TEKS-aligned diagnostic assessments and checkpoints. These assessments include interactive item types, such as multiple-choice, inline-choice, graphing, text-entry, number lines, tables, and multi-select questions.

The diagnostic assessments include questions with varying complexity levels. Several questions ask students to perform basic calculations. As questions increase in complexity, students may be asked to classify objects, such as quadrilaterals, or to compare the reasonableness of two different estimates. The variety of depth and rigor present on the diagnostic assessments addresses more than two levels of complexity. The further students advance within the diagnostic, the more complex questions are asked; if a student does not get far within the diagnostic, they will not engage with a variety of complex questions.

## 2.1e – Materials include a variety of formative assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels.

Materials include a variety of formative assessments with TEKS-aligned tasks and questions that involve interactive item types of varying complexity levels. IXL "Quizzes" and IXL "Group Jam" can be customized by teachers and include a variety of formative assessment options such as quizzes, checkpoints, warmups, lessons, and competitions. Materials are customizable and TEKS-aligned, spanning multiple topics and featuring interactive item types such as multiple-choice, inline-choice, graphing, text-entry, drag-and-drop, number lines, tables, graph tools, and multi-select questions with varying levels of complexity.

The materials include TEKS-aligned lessons that are scaffolded in complexity. These lessons incorporate Depth of Knowledge (DOK) levels one to four within lessons, tasks, and skills. For example, in grade 6, students begin their study of ratios by identifying a part-to-whole ratio, then progressing to calculating ratios as a percent. They then advance to interpreting and comparing models that demonstrate ratios and percents in real-world scenarios, and finally, they solve multi-step ratio problems.

#### 2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	Materials do not include a rationale for teachers to analyze correct or	1/3
2.2a	incorrect responses.	1/3
2.2b	All criteria for guidance met.	1/1
2.2c	All criteria for guidance met.	2/2
2.2d	This guidance is not applicable to the program.	N/A
2.2e	All criteria for guidance met.	1/1
_	TOTAL	5/7

## 2.2a – Instructional assessments include scoring information and guidance for interpreting student performance, including rationale for each correct and incorrect response.

The IXL "Analytics" section provides scoring information and guidance to help educators interpret and track student performance; however, materials do not include a rationale for correct responses. Materials include suggestions for responding to data, such as setting personalized learning goals based on student progress. The materials also include teacher and parent guides that explain the meanings of scoring and Smart Goal targets. Materials include scoring data and reports that display student performance by skill. The reports provide scoring benchmarks, including 80 for proficiency, 90 for excellence, and 100 for mastery. The materials also include guidance documents for teachers and families that explain how to interpret scores and monitor student progress.

The materials provide real-time feedback, step-by-step explanations, and embedded video guidance on how to arrive at or correct solutions when students incorrectly answer questions; however, there is no student rationale for correct responses. Materials do not include a rationale for teachers to analyze correct or incorrect responses.

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

The "Flex Diagnostic Strand Analysis," located within IXL "Analytics," guides teachers in analyzing student performance and responding to trends in student progress.

Additionally, the "Diagnostic Strand Analysis," "Implementation Guides," and "Analytics" guide teachers in grouping students by performance level and assigning skills that address specific learning needs. For example, teachers can track students' mastery of skills, sort students in a gradebook view, and respond to ongoing trends by assigning skills to specific groups of students.

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

Teachers can track student progress and growth through the IXL "Classroom Report" and IXL "Student Score Chart" located within IXL "Analytics." Materials include an educator dashboard, which provides recommendations for real-time progress monitoring at both the class and individual levels.

Materials give students the ability to track their progress and growth using IXL SmartScores, progress bars, personalized skill recommendations, and an IXL "Diagnostic Tracker," offered digitally or on paper.

## 2.2d – If designed to be static, materials provide prompts and guidance to support educators in conducting frequent checks for understanding at key points throughout each lesson or activity.

This guidance is not applicable because the program is not designed to be static.

## 2.2e – If designed to be adaptive, materials provide frequent checks for understanding at key points throughout each lesson or activity.

IXL is adaptive, and the IXL "Skill Plans" include lessons with embedded checks for understanding before and during the lesson, differentiated questions based on student responses, and immediate feedback with hints and explanations for wrong answers.

The IXL "Lightning Jam Session" offers interactive practice through whole-group response opportunities that assess understanding at multiple key points within the lesson. Teachers have the option of assigning skills, which include differentiated lessons with built-in checks for understanding, to students who are struggling academically.

### 3. Supports for All Learners

Materials support educators in reaching all learners through design focused on engagement, representation, and action/expression for learner variability.

#### 3.1 Differentiation and Scaffolds

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.1a	All criteria for guidance met.	1/1
3.1b	All criteria for guidance met.	4/4
3.1c	All criteria for guidance met.	2/2
3.1d	The materials do not include content and language support or calculators.	1/3
3.1e	All criteria for guidance met.	2/2
_	TOTAL	10/12

## 3.1a – Materials include explicit educator guidance for lessons or activities scaffolded for students who have not yet reached proficiency in prerequisite or grade-level concepts and skills.

Materials include explicit educator guidance for scaffolding instruction, identifying gaps in prerequisite skills, and assigning targeted practice that aligns with grade-level concepts and skills. Tools such as the "Implementation Guides" and the "Flex Diagnostic Strand Report" include real-time student progress monitoring and embedded tools that allow educators to scaffold learning for students who require additional support before progressing toward more complex grade-level content. For example, once students complete the "Flex Diagnostic Interactive Assessment," teachers can view student progress in real time, monitor student growth and proficiency over time, and facilitate appropriate support for students not meeting grade-level concepts or skills through activities such as assigning scaffolded lessons to a small group or an IXL "Group Jam" to address specific learning gaps.

### 3.1b – Materials include explicit educator guidance for language supports, including preteaching and embedded supports for developing academic vocabulary and unfamiliar references in text.

Materials guide language and academic vocabulary support for students. IXL's video tutorials, such as "Get more out of 'Learn with an Example'," include suggested educator guidance for using IXL's explanations for preteaching and embedding vocabulary support and unfamiliar references. For example, the IXL "Mini" titled "Get more out of 'Learn with an Example'" explains how academic vocabulary support is addressed within the materials and shows how students can navigate through embedded supports.

IXL "Skills" and "Learn with an Example" include embedded hyperlinks for vocabulary and unfamiliar math references that hyperlink to other lessons and skills related to the unknown vocabulary word.

Materials also include bolded vocabulary words, picture support, audio support, detailed video explanations, and step-by-step examples. Teachers can assign IXL "Skills" with vocabulary terms or prerequisite lessons, and students can reference the lesson and embedded supports. Materials explain the term in context in a video and/or written formation for students to review before they continue the practice. For example, when introducing the term *integer*, the video explanation defines the term with words and visuals and explains the term using examples. Additionally, "IXL for Math Discourse" provides explicit guidance on how to use available tools to develop and pre-teach academic vocabulary.

## 3.1c – Materials include explicit educator guidance for enrichment and extension activities for students who have demonstrated proficiency in grade-level and above grade-level content and skills.

The "Diagnostic," "Flex Diagnostic Strand Analysis," and "Implementation Guides" provide guidance for educators in identifying students who are ready for enrichment and extension activities. These guides also explain how to adapt features, adjust rigor, and extend learning for students who have demonstrated proficiency in grade-level and above-grade-level content and skills. For example, teachers can monitor progress on the "Flex Diagnostic," identify students who have mastered grade-level content, assign higher-level skills and pathways, set individualized SmartScore goals, and/or view the most missed questions on an activity to pull a small group.

Materials identify student proficiency levels and recommend "Next Up" skills or the "Recommendations Wall." Materials also offer suggestions for students to access higher-level or above-grade-level pathways, which adapt to student responses and increase in rigor and complexity as students master questions and tasks.

## 3.1d – Digital materials include accommodations, including text-to-speech, content and language supports, and calculators that educators can enable or disable to support individual students.

Materials do not include content and language support or calculators. Educators can toggle the text-to-speech functionality on or off to support individual students during assessments and practice activities. Teachers can access this feature through language preferences within their "Profile and Settings." For example, a teacher can enable text-to-speech for individual students for IXL "Skills," IXL "Quizzes," IXL "Diagnostic," and IXL "Group Jam."

The materials provide teachers with step-by-step guidance and enable customization of the following accommodations: changing languages to translate problems, enabling or disabling text-to-speech, adding or removing countdown timers, hiding or allowing the scratchpad option, setting personalized goals, and hiding grade levels for lessons. For instance, a student can access text-to-speech and translation by clicking the button at the top left of their questions within lessons once teachers have enabled language preferences and text-to-speech in their "Profile and Settings."

## 3.1e – Materials include educator guidance on offering options and supports for students to demonstrate understanding of mathematical concepts in various ways, such as perform, express, and represent.

Materials offer educators guidance on multiple ways students can demonstrate mathematical understanding. For example, students can demonstrate their understanding through interactive exercises, real-world applications, visual models, graphs, equations, written explanations, and interactive questions, including drag-and-drop, drawing tools, highlighting, and number lines.

Embedded tools give students the ability to perform, express, and represent their knowledge and learning in a variety of ways. The "Implementation Guides" provides educator guidance through videos, "Skill Plans," and step-by-step guides for implementing these tools. This guidance includes explanations on how to monitor student feedback in real time, read detailed error explanations, view step-by-step examples, and preview and review lessons.

#### 3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	All criteria for guidance met.	5/5
3.2b	This guidance is not applicable to the program.	N/A
3.2c	All criteria for guidance met.	3/3
3.2d	All criteria for guidance met.	2/2
3.2e	All criteria for guidance met.	2/2
_	TOTAL	12/12

# 3.2a – Materials include explicit (direct) prompts and guidance for educators to build knowledge by activating prior knowledge, anchoring big ideas, and highlighting and connecting key patterns, features, and relationships through multiple means of representation.

The materials provide explicit guidance and prompts for educators to build knowledge by activating prior knowledge, anchoring big ideas, and highlighting and connecting key patterns, features, and relationships through multiple means of representation. IXL's "Learn with an Example" and embedded tutorial videos, located within IXL "Lessons," provide guidance for connecting new concepts to students' existing knowledge and highlighting key connecting concepts.

The "Implementation Guide for Daily Instruction" and other "Implementation Guides" provide recommendations and guidance on connecting new concepts to students' existing understanding. Materials also offer guidance on visual tools and manipulatives, such as algebra tiles, number lines, tables, and diagrams. For instance, teachers can assign lessons and skills that connect previously learned materials by using scaffolding, concept review, and small-group interventions.

The IXL "Spark Studio," a game and worksheet generator, and the IXL "Group Jam" offer options to highlight and connect key patterns, features, and relationships through multiple means of representation, activities, and games. For example, "Spark Studio" can be used to design warm-ups, games, exit tickets, lessons, worksheets, and differentiated activities and games.

## 3.2b – If designed to be static, materials include educator guidance for effective lesson delivery and facilitation using various instructional approaches.

This guidance is not applicable because the program is not designed to be static.

## 3.2c – Materials include multi-tiered intervention methods for various types of practice and structures and educator guidance to support effective implementation.

The "Flex Diagnostic Strand Analysis" and "Real-Time Diagnostic" include educator guidance for multitiered intervention methods for various types of practice. The materials guide identifies student needs and recommends targeted practice skills to address these needs.

The "Implementation Guides" and "Analytics Reports" provide educators with guidance on small-group and whole-class planning based on real-time performance data. For instance, teachers can implement intervention through guided, independent, collaborative, and competitive activities using tools like "Group Jam," "Lightning Jam," and "Spark Studio."

### 3.2d – Materials include enrichment and extension methods that support various forms of engagement, and guidance to support educators in effective implementation.

The IXL "Spark Studio" provides enrichment and extension methods that support various forms of engagement. Materials include interactive tools, such as game builders, worksheet generators, flashcards, and activities that offer choices for student engagement.

The "Implementation Guides" provide guidance to support education in the effective implementation of enrichment and extension methods. Materials guide the creation of custom activities, differentiation, and the utilization of various tools and resources in IXL "Spark Studio." For instance, "Group Jam," "Leaderboards," and "Live Classroom" features offer collaborative and competitive activities that include extended learning and promote active participation.

## 3.2e – Materials include prompts and guidance to support educators in providing timely feedback during lesson delivery.

The IXL "Live Classroom" and "Live Reports" located within "IXL Analytics" support educators in providing real-time feedback during lessons. The materials include tools that monitor real-time performance through color-coded indicators and pacing data while also identifying areas of struggle.

Materials include embedded prompts that recommend data points of intervention, targeted supports, a private messaging feature, or embedded feedback while students are actively working within the lessons.

Materials also include embedded feedback based on student responses, which highlights errors and provides hints to guide learning toward the correct answer.

#### 3.3 Support for Emergent Bilingual Students

An emergent bilingual student is a student who is in the process of acquiring English and has another language as the primary language. The term emergent bilingual student replaced the term English learner in the Texas Education Code 29, Subchapter B after the September 1, 2021 update. Some instructional materials still use English language learner or English learner and these terms have been retained in direct quotations and titles.

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.3a	This guidance is not applicable to the program.	N/A
3.3b	Materials do not include embedded linguistic accommodations for more than two levels of language proficiency.	2/4
3.3c	Materials do not include bilingual or ESL programs.	0/1
3.3d	Materials do not include guidance for teachers to support emergent bilingual students in building background knowledge or making cross-linguistic connections through oral and written discourse.	4/8
3.3e	This guidance is not applicable to the program.	N/A
_	TOTAL	6/13

3.3a – If designed to be static, materials include educator guidance on providing and incorporating linguistic accommodations for all 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.

This guidance is not applicable because the program is not designed to be static.

3.3b – If designed to be adaptive, materials include embedded linguistic accommodations for all levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language.

Materials include embedded linguistic accommodations based on the ELPS for two levels of language proficiency. IXL "Lessons" include embedded linguistic accommodations, such as a clickable glossary that features key vocabulary terms and provides visual representations, as appropriate.

Materials include embedded visuals of vocabulary words and a clickable green box that offers Spanish translations of key terms, questions, answers, and directions. Materials also include accommodations, such as translation of materials in over 90 languages, step-by-step examples and videos, and immediate feedback.

## 3.3c - Materials include implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL programs.

Materials do not include bilingual or English as a Second Language (ESL) program or implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL programs.

## 3.3d – Materials include embedded guidance 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 some support for educators to promote the development of academic vocabulary and increased comprehension through oral and written discourse, but materials do not include embedded guidance to support emergent bilingual students in building background knowledge or making cross-linguistic connections through oral and written discourse.

The "IXL for Math Discourse" offers guidance for supporting academic vocabulary and increasing comprehension through math discourse in individual reflection, partner share, and class discussion. Materials include prompts such as "Can you use the word \_\_\_ in your explanation?", "Did anyone else solve this problem in a different way?", "Whose representation is the most helpful? Why?", and "How could your partner's explanation be clearer?"

The "Spotlight on Vocabulary" offers guidance for developing vocabulary in math discourse and through "Group Jam" reflections and discussions. In addition to oral discussion, students record written responses to these prompts, requiring them to apply academic vocabulary in writing. Prompts for vocabulary include "Is this an example of \_\_\_? Why or why not?" and "Can you restate that approach, but use the word \_\_\_\_ in your explanation?"

Materials include bilingual translations for students to use when they encounter unfamiliar words or phrases. IXL offers written translation into 100 languages, located within IXL "Skills," IXL "Group Jam," and quizzes. These written tasks encourage students to explain reasoning, justify answers, and restate concepts, supporting comprehension through written discourse.

## 3.3e – If designed for dual language immersion (DLI) programs, materials include resources that outline opportunities to address metalinguistic transfer from English to the partner language.

This guidance is not applicable because the program is not designed for dual language immersion (DLI) programs.

### 4. Depth and Coherence of Key Concepts

Materials are designed to meet the rigor of the standards while connecting concepts within and across grade levels/courses.

#### 4.1 Depth of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.1a	All criteria for guidance met.	2/2
4.1b	All criteria for guidance met.	4/4
_	TOTAL	6/6

## 4.1a – Practice opportunities throughout learning pathways (including instructional assessments) require students to demonstrate depth of understanding aligned to the TEKS.

The IXL "Diagnostic" places students on a scaffolded, TEKS-aligned, and individualized learning pathway called an IXL "Skill Plan," which increases in complexity and depth of understanding as students work. For example, the "Skill Plan" for dividing fractions first focuses on using models to divide, then on writing equations, and finally on word problems.

The IXL SmartScore and IXL "Diagnostic" utilize adaptive technology that adjusts in real time, guiding students toward mastery of the TEKS. For instance, IXL will place a student according to their level of understanding of a skill and will engage them in increasingly complex problems until they reach a SmartScore of 80 for proficiency, 90 for excellence, or 100 for mastery. As the student masters questions and tasks, IXL will interact with these new levels and continue to provide enrichment. As students demonstrate mastery, materials move students within and beyond grade-level content.

## 4.1b – Questions and tasks, including enrichment and extension materials, increase in rigor and complexity, leading to grade-level and above grade-level proficiency in the mathematics TEKS.

The IXL "Diagnostic" places students on an individualized starting point to work on skills aligned with their current understanding. The materials automatically adapt to student performance through the IXL SmartScore, gradually increasing in difficulty by intentionally increasing the rigor and complexity of questions to achieve grade-level and above-grade-level proficiency. For example, the "Skill Plan" for representing rational numbers and integers on a number line first focuses on placing rational numbers on a number line, followed by comparing and ordering rational numbers on a number line, then moves on to placing integers on a number line, followed by graphing integers on horizontal and vertical number lines, then onto comparing integers on a number line, to finally putting integers in order using a number line.

The materials help teachers monitor and assign content based on pood and guide them in identifying
The materials help teachers monitor and assign content based on need and guide them in identifying opportunities for enrichment and extension. Student dashboards allow families and teachers to track progress toward grade-level and above-grade-level skills.

#### 4.2 Coherence of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.2a	All criteria for guidance met.	1/1
4.2b	Materials do not demonstrate vertical coherence across the full span of grades 3–12.	0/1
4.2c	Materials do not demonstrate coherence across lessons or activities by connecting students' prior knowledge of concepts and procedures to the mathematical concepts to be learned in the current grade level and future grade levels.	0/4
_	TOTAL	1/6

## 4.2a – Materials demonstrate coherence across concepts horizontally within the grade level by connecting patterns, big ideas, and relationships.

IXL "Learning" demonstrates horizontal coherence by guiding students to related lessons and skills that reinforce patterns, big ideas, and conceptual relationships within grade 6. Materials are organized by sequence, and IXL includes personal recommendations based on diagnostic data, which reinforce logical progression across related topics and support student understanding of concepts. For instance, IXL offers unit overviews that explicitly connect concepts such as understanding ratios, supporting solving percent problems, interpreting scale drawings, and analyzing data, which emphasize coherence and real-world applications.

Materials give teachers the ability to assign cross-topic skills; teachers can view skills from all grade levels to see how content connects horizontally through scaffolding and recurring themes.

## 4.2b – Materials demonstrate coherence vertically across concepts and grade bands, including connections from grades 3–12, by connecting patterns, big ideas, and relationships.

The materials include features such as the IXL "Flex Diagnostic Action Plan" and "Up Next Recommendations" that allow students to engage with skills across grade levels. However, the materials do not include a rationale explaining how content is vertically aligned across grades 3–12. While teachers can assign skills from other grades, the materials do not provide a designed pathway or narrative that explains conceptual progression across grade bands.

The materials include personalized learning pathways that adapt to students' performance. While these features expose students to concepts from earlier or later grade levels, the materials do not include a rationale that explains how content is intentionally sequenced or designed to support conceptual development across grade bands. Although some videos address foundational skills, they do not establish a coherent explanation of vertical alignment across grades 3–12.

4.2c – Materials demonstrate coherence across lessons or activities by connecting students' prior knowledge of concepts and procedures to the mathematical concepts to be learned in the current grade level and future grade levels.

Materials do not demonstrate coherence across lessons or activities. Materials do not connect students' prior knowledge of concepts and procedures to the mathematical concepts to be learned in the current grade level and future grade levels.

#### 4.3 Coherence and Variety of Practice

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.3a	All criteria for guidance met.	2/2
4.3b	All criteria for guidance met.	2/2
_	TOTAL	4/4

## 4.3a - Materials provide spaced retrieval opportunities with previously learned skills and concepts across learning pathways.

Materials include spaced retrieval through weekly "LevelUp Diagnostic" questions that revisit previously learned skills and generate personalized recommendations. Materials prompt students to review earlier skills, such as basic number operations, before operations with integers.

The materials explain how to assign spiraled tasks and embed opportunities for students to retrieve and reinforce past conceptual learning across learning pathways. Lessons are adaptive and designed to build upon each other, allowing students to revisit lessons and practice materials at any time; this enables ongoing reinforcement of prior concepts.

## 4.3b - Materials provide interleaved practice opportunities with previously learned skills and concepts across learning pathways.

Materials provide interleaved practices through the "LevelUp Diagnostic," "Group Jam," and "Create a Quiz," which combine multiple topics, such as fractions, ratios, and percents, into one cohesive session that reinforces skills from multiple concepts.

Materials automatically prompt students to revisit and apply previous learning when needed based on diagnostic results, real-time performance, or teacher differentiation. Students can engage with a variety of mathematical concepts within the lessons, which promotes long-term mastery and problem-solving. For example, the program may direct students who struggle with percent problems to review foundational fraction or ratio skills.

### 5. Balance of Conceptual and Procedural Understanding

Materials are designed to balance conceptual understanding, procedural skills, and fluency.

### 5.1 Development of Conceptual Understanding

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.1a	All criteria for guidance met.	3/3
5.1b	All criteria for guidance met.	2/2
5.1c	All criteria for guidance met.	1/1
_	TOTAL	6/6

### 5.1a – Questions and tasks provide opportunities for students to interpret, analyze, and evaluate mathematical concepts and complex, real-world situations.

Materials include questions and tasks that provide students with consistent opportunities to engage in interpreting, analyzing, and evaluating mathematical concepts through real-world contexts and multistep tasks.

The materials embed a variety of questions and tasks, including fill-in-the-blank items, drag-and-drop questions, problems that require justification, and problems that involve real-world contexts. This variety of questions and tasks provides students with multiple opportunities to engage in and deepen their understanding of mathematical concepts.

IXL "Lessons" guide and encourage students to engage in strategic and complex problem solving, requiring reasoning, comparison, and calculation through real-world examples and multistep problems. For example, the grade 6 lesson on linear relationships asks students to interpret the meaning of a point on a graph from a real-world situation, analyze the relationship between the coordinates and the values they represent, determine the constant of proportionality, and model the relationship by writing an equation. Finally, students evaluate their work and explain how the constant of proportionality is visible in the graph.

## 5.1b – Questions and tasks provide opportunities for students to create concrete models and representations of mathematical situations.

The IXL "Lessons" include interactive and adaptive tasks and questions that provide opportunities for students to create models and representations of mathematical situations that are embedded within the program.

The materials allow students to engage in tasks that prompt them to construct visual representations of relationships, such as strip diagrams, tables, graphs, and charts.

Interactive tasks enable students to create and manipulate visual models, such as number lines, to model integer addition and subtraction.

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

IXL "Lessons" include activities, questions, and tasks that prompt students to apply and transfer their conceptual understanding into new problems and contexts. For example, in the grade 6 lesson "Compare Checking Accounts," the materials prompt students to apply their knowledge of bank fees and features to analyze a real-world table of data by interpreting data, applying information, calculating differences, identifying key differences between each service, and justifying their selection of a reasonable financial choice.

IXL "Quizzes" and IXL "Group Jam" give educators the ability to create custom quizzes and sessions using IXL tools, which feature new and unfamiliar problems and contexts. For instance, teachers can design a custom quiz for students to practice and apply their conceptual understanding to various problems.

#### 5.2 Development of Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.2a	All criteria for guidance met.	2/2
5.2b	All criteria for guidance met.	3/3
5.2c	All criteria for guidance met.	3/3
5.2d	All criteria for guidance met.	1/1
_	TOTAL	9/9

## 5.2a – Materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level mathematical tasks.

The "Spark Studio" includes tasks and activities designed to build student automaticity and fluency. Materials include opportunities to create personalized skill practice, fluency and repetition options, and generate interactive games and activities through a variety of tools, such as flashcards, worksheets, quizzes, word searches, crossword puzzles, and Jeopardy.

The SmartScore provides students with the automaticity and fluency needed for grade-level math tasks and lessons. Materials include an adaptive system that adjusts question difficulty to match student proficiency and provides repeated and targeted practice to build speed and accuracy.

### 5.2b – Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures throughout learning pathways.

Materials provide opportunities for students to practice applying efficient, flexible, and accurate mathematical procedures within the "IXL Skill Plans" tools, such as the SmartScore system. The Smart Score system offers personalized, step-by-step practice that adjusts in real time to student answers as it guides students toward grade-level proficiency and above throughout lessons.

The materials provide opportunities for students to practice accurate mathematical procedures. For example, when solving equations, the materials explain the value of using substitution to check solutions.

The materials provide opportunities for students to practice efficient and flexible mathematical procedures. For example, when determining the area of compound shapes, the materials ask students to determine the area of compound shapes that can be decomposed in multiple ways. The lesson then provides an explanation that emphasizes the most efficient solution.

## 5.2c – Materials provide opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy throughout learning pathways.

Materials provide opportunities for students to evaluate mathematical representations, models, strategies, or solutions for efficiency, flexibility, or accuracy throughout learning pathways.

The "Recommendations Wall" presents students with various mathematical representations, models, and strategies (such as visual models, numeric shortcuts, and standard algorithms), encouraging them to evaluate the quickest and most adaptable approach for the task, fostering flexibility and accuracy throughout their learning journey.

The material provides students with an IXL SmartScore that directly reflects accuracy. A dropping SmartScore or prolonged struggle in a skill signals to the student (and teacher) that their current understanding or method is not consistently leading to accurate solutions. This feature prompts them to reevaluate their approach to achieve a higher score.

The materials provide opportunities for students to practice accurate mathematical procedures. For example, when solving equations, the materials explain the value of using substitution to check solutions. Materials also include an error analysis task within several activities, which provide opportunities for students to evaluate representations. For example, a task will show completed work for evaluating an expression with listed steps. It will then ask the student to determine if the solution was correct or incorrect, providing the correct rationale.

### 5.2d – Materials contain guidance to support students in selecting the most efficient approaches when solving mathematics problems.

Materials contain embedded guidance and instructional supports to help students select the most efficient approaches when solving math problems. For example, the lesson Multiplying Decimals introduces decimal multiplication with grid models. Successive lessons demonstrate how to multiply decimals without grids, utilizing the standard algorithm.

Materials include "Learn with an Example" lessons, video tutorials, and features that model multiple strategies for solving problems. Materials contain skill explanations with immediate feedback and question explanations, which guide students through addressing misconceptions and suggest hints and step-by-step directions for solving.

#### 5.3 Balance of Conceptual Understanding and Procedural Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.3a	The materials do not explicitly state how the conceptual and procedural	0/2
3.5a	emphases of the TEKS are addressed.	0/2
5.3b	All criteria for guidance met.	3/3
5.3c	All criteria for guidance met.	6/6
_	TOTAL	9/11

### 5.3a – Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed.

Materials explicitly state how skills are scaffolded within the IXL platform. For example, the videos "How IXL Aligns with the TEKS" and IXL "Minis" explain IXL's instructional approach. However, the materials do not explicitly explain how they address the conceptual and procedural emphases of the TEKS.

IXL "Lesson Notes" discuss a variety of topics, explaining the conceptual and procedural emphasis of the TEKS and how they are applied within the lesson. Materials state how visual models connect to symbolic representations of mathematical concepts. The materials include scaffolded skill progressions that allow students to interact with visual models, such as area models, number lines, and tables, before introducing abstract procedures, including algorithms for fraction multiplication. For example, "Multiply Fractions Using Area Models" explains how to analyze proportional relationships in tables and graphs, explicitly describing the conceptual connection to the area model. The lesson then builds procedural fluency through repeated examples of similar problems. While these activities provide opportunities for students to learn both conceptually and procedurally, the materials do not explicitly state how they address the conceptual and procedural emphases of the TEKS.

## 5.3b – Questions and tasks provide opportunities for students to use concrete models, pictorial representations, and abstract models as required by the TEKS.

Materials provide questions and tasks that offer opportunities for students to use concrete models, pictorial representations, and abstract reasoning, as required by the TEKS.

IXL "Lessons" and "Skill Plans" include questions and tasks that provide opportunities for students to create pictorial representations of mathematical situations and concrete models of mathematical concepts. For example, in grade 6, "Interpret Unit Rates in Graphs," students use visual representations of coordinate planes to analyze linear relationships. The lesson "Solve Systems of Equations by Substitution" provides data displays and demonstrates how to represent the data with proportional equations.

Students engage with concrete and pictorial representations through skills such as "Solve percent problems using strip models" and "Use tape diagrams to solve ratio word problems." These skills use concrete models to help students build conceptual understanding, which they later apply to abstract concepts when working with unit rates.

## 5.3c - Materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS.

Materials include support for students in connecting, creating, defining, and explaining concrete and representational models to abstract concepts required by the TEKS. IXL "Skill Plans" and IXL "Lessons" provide scaffolded, sequenced skills that guide students in using concrete and visual representations in conjunction with abstract reasoning skills.

Materials guide students in developing skills that utilize visual representations, such as number lines, bar graphs, and coordinate planes, before introducing symbolic representations and equations. For example, "Use Tape Diagrams to Solve Ratio Problems" introduces ratios with tape diagrams before explaining how to represent ratios by writing equations. Finally, students create tape diagrams based on word problems.

#### 5.4 Development of Academic Mathematical Language

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.4a	All criteria for guidance met.	1/1
5.4b	All criteria for guidance met.	2/2
5.4c	All criteria for guidance met.	1/1
5.4d	All criteria for guidance met.	2/2
5.4e	Materials do not include embedded guidance for anticipating a variety of students' answers, including exemplar responses to questions and tasks.	1/2
	TOTAL	7/8

### 5.4a – Materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, or other language development strategies.

Materials provide opportunities for students to develop academic mathematical language using visuals, digital manipulatives, and other language development strategies within the "IXL Lessons" and "Skill Plans." Materials include embedded visual representations, embedded vocabulary support, and interactive formats to support students in learning and applying mathematical language and key vocabulary.

IXL "Lessons" often pair visuals with key terms and include bolded vocabulary words within the lessons that are often accompanied by inline definitions or hyperlinks to other IXL lessons that expand the term in greater detail. For example, vocabulary terms such as *faces*, *edges*, and *vertices* are bolded within the lessons and often accompanied by inline definitions or hyperlinks to other IXL "Lessons" that provide greater detail on the term.

Materials also include digital manipulatives, animations, videos, and drag-and-drop or labeling tasks to reinforce and represent mathematical language. For example, in the lesson "Nets of Three-Dimensional Figures," students use visual models to explore how three-dimensional shapes unfold into two-dimensional nets and connect and label key terms such as *faces*, *edges*, and *vertices* to visuals.

## 5.4b – Materials include embedded educator guidance to scaffold, support, and extend students' use of academic mathematical vocabulary in context when communicating with peers and educators.

The "Spotlight on Vocabulary" section offers educators guidance on scaffolding, supporting, and extending students' academic mathematical vocabulary for communicating and discussing mathematics with peers and the whole group. Materials include guidance for introducing new vocabulary, such as encouraging teachers to have students record vocabulary words in their math journal by writing or drawing the meaning of each word, or by using a classroom vocabulary chart. Materials provide guidance on using IXL "Group Jam" to foster classroom communication, offering suggestions for prompts and tasks

that help students engage with vocabulary. For example, materials suggest teachers can reinforce vocabulary within Group Jam discussions by using prompts such as "Can anyone remind us what \_\_\_ means?" or "Is this an example of \_\_? Why or why not?"

IXL "Skills" and IXL "Lessons" include embedded keywords hyperlinked to definitions and video explanations, which educators and students can access as needed.

## 5.4c – Materials include embedded guidance to support student application of appropriate mathematical language and academic vocabulary in discourse.

Materials include embedded guidance to support student application of appropriate mathematical language and academic vocabulary in discourse. The IXL "Instructional Strategies Guide on Math Discourse" provides guidance and prompts for teachers to use when guiding mathematical language during discourse. For example, materials suggest prompts such as, "Can you use the word \_\_\_ in your explanation?" and "Can you restate that approach, but use the word \_\_\_ in your explanation?" when using IXL "Group Jam."

Materials include translations in over 90 languages for students to select through a speaker icon next to directions, questions, and prompts; however, there is no evidence of the ability to record their math language or discuss with peers.

## 5.4d - Materials include embedded guidance to facilitate mathematical conversations allowing students to hear, refine, and use math language with peers.

The "IXL Instructional Strategies Guide on Math Discourse" provides guidance for educators to facilitate student mathematical conversations that allow them to hear, refine, and use math language with peers. Materials include guidance and prompts for teachers to facilitate mathematical conversations with peers and class discussions to help students refine their language by suggesting questions such as "How did you solve this problem?", "What part of your partner's explanation was helpful to you?", and "How could your partner's explanation be clearer?"

Materials suggest using "Group Jam" as a classroom discourse tool by having students work on the same question simultaneously to create opportunities for discussion and collaboration. Materials include educator guidance for individual reflection, partner share, and classroom discussion with prompts and questions.

## 5.4e – Materials include embedded guidance to anticipate a variety of student answers including exemplar responses to questions and tasks, including guidance to support and/or redirect inaccurate student responses.

Materials include guidance for supporting and redirecting inaccurate student responses as shown in the "Recommendations Wall" and SmartScore. A dropping SmartScore or prolonged struggle in a skill signals

to the student (and teacher) that their current understanding or method is not consistently leading to accurate solutions. This feature prompts them to reevaluate their approach to achieve a higher score. The "Recommendations Wall" presents students with various mathematical skills and lessons at their entry level. Materials adapt to student needs and responses as they work through their IXL "Skill Plans," often adjusting to prerequisite skills or advanced skills based on student responses. For instance, if a student incorrectly answers a mathematical question on fractions, the "Recommendations Wall" will suggest one or two lessons for students to practice if they are not ready for the skill. However, materials do not include embedded guidance for anticipating a variety of students' answers or exemplar responses before incorrectly selecting an answer.

Materials correct common misconceptions made by students by providing detailed explanations with step-by-step feedback and videos for inaccurate student responses. Materials also include an error analysis task within several activities, which provide opportunities for students to evaluate representations. For example, a task will show completed work for evaluating an expression with listed steps, then ask the student to determine if the solution was correct or if it was not accurate, with the correct rationale. However, materials do not include embedded guidance for anticipating a variety of students' answers.

#### 5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	Materials do not include a description of how process standards are incorporated and connected throughout the learning pathways.	0/2
5.5c	All criteria for guidance met.	1/1
_	TOTAL	2/4

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

Materials integrate the TEKS process standards appropriately within IXL "Lessons" and IXL "Skill Plans." The IXL "Teacher Toolkit" includes an overview of where the process standards are addressed across units, skills, and lessons. IXL "Lessons" and IXL "Skill Plans" explicitly connect content to the TEKS by embedding process skills and integrating standards within lessons. Materials include a grade-level skill plan with a section specifically labeled "Mathematical Process Standards," which provides lessons where students can apply process standards to real-world word problems, multi-step problems, and interactive tasks. For example, the lesson "Multi-Step Word Problems" requires students to apply reasoning, plan how they will find their solutions, model problems, and communicate solutions within the lesson by asking multiple interactive questions and types with multiple means of showing and selecting answers.

## 5.5b – Materials include a description of how process standards are incorporated and connected throughout the learning pathways.

Materials include lessons embedded with process standards that students revisit consistently as they progress through learning pathways. For example, a grade 6 student will progress through their skill plan and revisit lessons such as "Solve Multi-Step Word Problems". Students practice real-world application, problem solving, reasoning, and justification of answers. While process standards are embedded within the lessons, the materials do not describe how they are incorporated.

The materials include opportunities for students to practice the process standards throughout the learning pathways. However, the materials do not include a description of how process standards are incorporated and connected throughout the learning pathways.

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

Materials include an overview of the TEKS process standards incorporated into each lesson. The "TEKS Skill Plan" includes a grade-specific TEKS overview that indicates which TEKS are aligned with which lesson, organized by standard and skill. "Skill Plans" are designed in sequential order by TEKS and process standards skills. The TEKS are incorporated into each lesson by connecting the TEKS to the skill.

For example "Complete a Table and Craph a Two Variable Equation" is explicitly connected to the TEKS	
For example, "Complete a Table and Graph a Two-Variable Equation" is explicitly connected to the TEKS, specifically reasoning and representing relationships, and is organized by standard, progressing from introductory to multistep, complex word problems.	

### 6. Productive Struggle

Materials support students in applying disciplinary practices to productive problem-solving, including explaining and revising their thinking.

#### 6.1 Student Self-Efficacy

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.1a	All criteria for guidance met.	3/3
6.1b	All criteria for guidance met.	3/3
6.1c	All criteria for guidance met.	3/3
_	TOTAL	9/9

## 6.1a – Materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics.

IXL provides opportunities for students to think mathematically, persevere through solving math problems, and make sense of mathematics. Materials include a range of multi-step word problems, real-world scenarios that require students to analyze, model, reason, reflect, and interpret. For example, materials include word problems, multi-step problems, and problems that require students to interpret and translate information from graphs, tables, and models, solve them, and interpret their solutions back into their original contexts.

Materials offer timely and relevant hints to guide students' thinking when they struggle to find a solution, such as breaking down the steps in translating words to expressions, highlighting key vocabulary, and showing how to simplify or rearrange expressions to find equivalencies. These tools provide opportunities for students to persevere through solving problems.

The IXL SmartScore adjusts in question difficulty and provides immediate feedback with step-by-step explanations that analyze errors, guide reflections, and conceptual understanding. Error analysis, reflection, the use of virtual manipulatives, and emphasis on conceptual foundations ensure that students have opportunities to make sense of mathematics. For example, as a student works through each grade 6 lesson, the SmartScore system gradually increases in problem difficulty based on the student's performance. Materials reward effort and accuracy, guiding students toward mastery. When a student makes a mistake, they can review detailed explanations and continue working toward mastery.

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

IXL provides opportunities for students to think mathematically, persevere through solving math problems, and make sense of mathematics. The "IXL for Math Discourse" includes teacher prompts and reflection questions for students to self-reflect or discuss with peers. For example, prompts include questions such as "How did you solve this problem?", "Did you and your partner solve the problem in

different ways?", "How would you convince someone who used a different method that your solution is correct?", and "Read your partner's written reflection. What parts do you understand? What do you have questions about?"

Materials support students in understanding that there are multiple ways to solve problems; they do not provide opportunities for them to explain or justify multiple solution paths for solving problems or completing tasks. The "Learn with an Example," embedded videos, and detailed explanations for incorrect responses offer detailed explanations that present multiple ways for students to arrive at a solution. Materials demonstrate various approaches to writing and solving equations, using diagrams and word problems, but there is no opportunity for students to articulate different methods or solution paths. For example, in "Conversions Between Decimals, Percents, and Fractions," embedded videos encourage students to use a variety of strategies to convert between decimals, percents, and fractions. Embedded videos explain and justify that there can be multiple ways to solve problems and complete tasks.

## 6.1c – Materials are designed to require students to make sense of mathematics through multiple opportunities for students to do, write about, and discuss math with peers and/or educators.

Materials include educator guidance for students to make sense of mathematics through doing, writing, and discussing mathematics through multiple opportunities. Materials do not require students to type in or speak solutions within the designed program; however, IXL offers guidance for integrating speaking and writing within the classroom.

"IXL for Math Discourse" offers suggestions and guidance for using verbal and written discourse within the classroom, such as providing individual reflection prompts and encouraging students to reflect and write their responses in a math journal. For example, guidance suggests teachers prompt students to write a reflection on their problem-solving process, then teachers will ask questions such as, "Read your partner's written reflection. What parts do you understand? What do you have questions about?"

"Live Classroom" sessions and IXL "Group Jam" allow students to work on the same skill in real-time collaboratively and enable students to discuss math with peers and educators. Materials also include educator prompts for Partner Share, Classroom Discussion, and printable discussion supports such as anchor charts and sentence starters, to guide students through academic discussions during and after problem-solving. IXL provides suggestions for teachers on supplementing "Group Jam" with sentence stems to support students in doing math with peers.

#### 6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	All criteria for guidance met.	8/8
6.2b	Materials do not include prompts or guidance to support educators in providing explanatory feedback based on anticipated misconceptions.	2/4
_	TOTAL	10/12

## 6.2a – Materials support educators in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, justifications, and multiple points of entry.

The "IXL for Math Discourse" guide prompts teachers to ask students to share and reflect on their problem-solving approaches, with questions such as "What did you try that did not work? Why did it not work? How do you know your approach worked? Could you have started solving this problem in a different way? How would you justify each step of your approach? Materials include prompts for individual work, partner share, and classroom discussion.

Materials provide educator guidance in using IXL explanations to guide students to share and reflect on their problem-solving approaches through the use of IXL "Minis" and recommend using "Group Jam" as a classroom discourse tool. For example, the IXL "Mini" video provides guidance on how to incorporate "Group Jam" into the classroom, and asks students to "share about math during 'Group Jam'."

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

Materials include prompts and guidance to support educators in providing explanatory feedback based on student responses. Materials do not provide prompts and guidance for anticipating misconceptions before instruction.

The "Flex Diagnostic Strand Analysis" and "Live Classroom" enable teachers to track student performance and intervene with recommended feedback. Materials include guidance on using the "Live Classroom" mode, which gives recommendations for teachers to track students' progress during lessons. Materials prompt teachers when a student is idle, may need help, or how many questions they have completed, then provide explanatory feedback based on student responses.

Lesson videos and detailed explanations offer additional instructional support and feedback for incorrect student responses. For instance, if a student incorrectly answers a question, the materials explain the error and provide a step-by-step rationale of why the answer is incorrect, as well as prompts that guide them to arrive at the correct solution. Materials sometimes offer students suggested hints to anticipate misconceptions, but they do not include direct teacher guidance.