MIND Education

Supplemental English Mathematics, 5
ST Math Texas Grade 5

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Supplemental	**9781606653593**	**Digital**	**Adaptive**

Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	11	0	Flags Addressed	Not Applicable	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	16 out of 21	76%
2. Progress Monitoring	18 out of 23	78%
3. Supports for All Learners	26 out of 37	70%
4. Depth and Coherence of Key Concepts	16 out of 16	100%
5. Balance of Conceptual and Procedural Understanding	38 out of 38	100%
6. Productive Struggle	19 out of 19	100%

Breakdown by Suitability Noncompliance and Excellence Categories

SUITABILITY NONCOMPLIANCE FLAGS BY CATEGORY	IMRA REVIEWERS	PUBLIC	Flags NOT Addressed by November Vote
1. Prohibition on Common Core	2	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 include consistent integration of the English Language Proficiency Standards (ELPS) to support language development alongside mathematics content.	4/5
1.1b	All criteria for guidance met.	3/3
1.1c	The materials do not include a diagnostic tool that recommends appropriate skill-based entry points based on student data.	1/2
1.1d	All criteria for guidance met.	2/2
1.1e	All criteria for guidance met.	2/2
—	**TOTAL**	12/14

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.

In grade 5, the materials feature well-organized scope and sequence documents that align with the Texas Essential Knowledge and Skills (TEKS) and demonstrate consistent vertical and horizontal progression of skills and objectives. Puzzle Talks are embedded throughout the units and are clearly connected to specific TEKS, supporting structured and intentional instruction.

In grade 5, the materials support math content development; they do not include explicit integration of the English Language Proficiency Standards (ELPS). Language objectives and targeted academic vocabulary supports are not consistently embedded within the lessons.

In grade 5, the materials lack consistent strategies to promote language development alongside mathematical instruction, limiting support for English learners throughout the program.

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

In grade 5, the materials include a comprehensive "Educator Implementation Guide" that offers clear and flexible usage recommendations. The guide supports a variety of instructional contexts, such as just-in-time interventions, enrichment for advanced learners, and full-course implementation. It also includes

sample daily and weekly schedules, strategic questioning prompts, and the Teacher Facilitation bookmark to support effective planning and instruction.

In grade 5, additional resources, such as the "Puzzle Talk Facilitation Guide" and the "Weekly Routine and Pacing Guides," provide further guidance on lesson pacing and integrating math discourse. These supports are consistent across grade levels and instructional settings, equipping educators with strategies to adapt instruction based on student needs.

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

In grade 5, the materials include a TEKS-aligned scope and sequence that clearly outlines the correlation between state standards, *ST Math* objectives, and accompanying Puzzle Talks. These correlations are well-organized by grade level and remain consistent across all Scope and Sequence documents, supporting instructional alignment and planning.

In grade 5, the materials also include objective-level pre- and post-quizzes found in the Objective Pre-Post Quizzes: Learning Objectives section, allowing teachers to monitor student progress. However, the materials do not provide a diagnostic tool or correlation guide that links student performance data to individualized skill-based entry points. This limits the ability to personalize instruction based on assessment outcomes.

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

In grade 5, the materials include clear protocols and guidance to support both unit- and lesson-level internalization. For unit planning, resources such as the Puzzle Talk Overview Page and the Preparing for This Puzzle Talk section provide key vocabulary, learning objectives, and a preview of puzzles. These tools help educators align instruction with the TEKS and effectively plan upcoming content.

In grade 5, for lesson internalization, the *ST Math* "All Learning Objectives: Overview and Standards" document outlines specific learning goals and instructional flow, supporting day-to-day planning. Additionally, the Professional Learning Hub offers asynchronous training modules that walk educators through internalization routines, reinforcing best practices for instructional preparation.

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

In grade 5, the materials include resources and guidance to support instructional leaders with effective program implementation. Tools such as the ST Math Walkthrough: Strategies and Puzzle Talks Walkthrough: Strategies provide practical steps for monitoring instructional fidelity and identifying areas where educators may need support.

In grade 5, the "Administrator Resource" documentation offers additional guidance for classroom observation and progress monitoring, assisting leaders in coaching teachers throughout implementation. While these tools are not labeled as formal professional development, they provide structured support for planning, coaching, and sustaining effective instructional practices.

1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	This guidance is not applicable to the program.	N/A
1.2b	The materials do not include lesson overviews or assessment resources that embed ELPS-aligned objectives.	3/5
1.2c	The materials do not include family supports in English and Spanish that are specific to each unit or learning pathway.	1/2
—	**TOTAL**	4/7

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.

In grade 5, the materials include TEKS-aligned pre- and post-assessments, embedded mastery checks within Puzzle Talks, and ELPS-aligned supports to help monitor student understanding. The *ST Math* "Weekly Routine and Pacing Guide" offers suggested time frames and instructional structure, supporting teachers in organizing lessons effectively.

In grade 5, the materials do not explicitly embed the English Language Proficiency Standards (ELPS) within lesson overviews or directly align assessments with ELPS objectives. This lack of integration limits the depth of support provided for English learners, particularly in aligning language development with content instruction.

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

In grade 5, the materials offer general family support resources in both English and Spanish. Tools such as the "Math Family Guide," "Facilitating Questions" poster, and printable activities under the ST Math Help tab provide strategies for supporting students at home. These resources encourage the use of consistent routines, math games, and promote productive struggle in problem-solving.

In grade 5, the materials do not provide unit-specific family guidance aligned to lesson objectives or pacing. Family resources in Spanish are not consistently available at the unit level, limiting accessibility

and alignment with students' current learning. As a result, families may find it challenging to support learning in a timely or targeted manner.

2. Progress Monitoring

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

2.1 Instructional Assessments

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.1a	All criteria for guidance met.	2/2
2.1b	All criteria for guidance met.	2/2
2.1c	The materials do not include accommodations, such as text-to-speech, content and language supports, or calculators, within digital assessments.	1/4
2.1d	All criteria for guidance met.	4/4
2.1e	All criteria for guidance met.	4/4
—	**TOTAL**	13/16

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

In grade 5, the materials clearly define the purpose of instructional assessments and their role in supporting student learning. Journal Pages are used as formative assessments to promote student accountability, monitor progress, and encourage written mathematical communication.

In grade 5, pre- and post-quizzes are designed to assess growth and help teachers identify gaps between students' conceptual understanding and their use of symbolic representation. Additional resources, such as the FAQs and Student Quiz Experience sections, provide guidance to reinforce consistent assessment practices and support effective classroom implementation.

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

In grade 5, the materials provide clear and consistent guidance for administering instructional assessments. Resources such as the Student Quiz Experience and Understanding Objective Pre and Post Quizzes outline expectations, recommended timing, required materials, and administration procedures.

In grade 5, teachers are supported with strategies and norms for delivering assessments, helping to ensure consistent and reliable implementation across classrooms. These tools promote fidelity in assessment practices and contribute to accurate monitoring of student progress.

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.

In grade 5, the materials include printable journal pages and quizzes, which allow teachers to offer assessments in a paper-based format when needed. The platform also provides basic features, such as language toggling between English and Spanish and some visual supports to assist students in understanding mathematical content.

In grade 5, the digital platform lacks adjustable accessibility features, such as text-to-speech functionality, embedded calculators, or customizable content and language supports that can be enabled or disabled by the educator. These limitations reduce the flexibility of the materials in meeting the varied needs of diverse learners.

In grade 5, without educator-controlled accommodations built into digital assessments, teachers have fewer options to tailor support for individual students, which may impact accessibility and equity in assessment practices.

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

In grade 5, the materials include diagnostic assessments aligned to the TEKS that feature interactive tasks of varied complexity. Students engage with sequenced puzzles designed to build conceptual understanding through increasingly challenging problems.

In grade 5, these assessments are embedded throughout both gameplay and instruction, allowing students to demonstrate their knowledge in formats that reflect item types, such as drag-and-drop and scenario-based problems. This integration supports ongoing monitoring of student progress while reinforcing key math concepts.

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

In grade 5, the materials embed a variety of formative assessments aligned to the TEKS, offering tasks in interactive formats and multiple levels of complexity. Students engage with exit tickets, puzzles, and Puzzle Talks that incorporate item types such as drag-and-drop, text entry, graphing, and model manipulation.

In grade 5, these assessments increase in difficulty as students progress, supporting continuous skill development. They also generate actionable data that helps teachers adjust instruction and provide targeted support based on individual learning needs.

2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	The materials do not include rationales for correct or incorrect responses, and do not provide guidance for interpreting student performance.	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 materials provide basic scoring information and performance data through pre- and post-quizzes. Teachers can access student progress via color-coded dashboards and standards-based reports, allowing them to monitor performance at both the individual and class levels.

The materials do not offer rationales for correct or incorrect answers. Additionally, there is no support provided for interpreting assessment results in a way that directly informs instructional adjustments.

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

In grade 5, the materials provide targeted guidance to help teachers respond effectively to student performance trends. Resources include strategies such as small group reteaching, the use of manipulatives, and structured prompts that encourage students to articulate their thinking.

In grade 5, this guidance is designed to align with assessment data, supporting responsive and differentiated instruction. By using these tools, educators can tailor their teaching to address learning gaps and reinforce key mathematical concepts based on students' individual needs.

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

In grade 5, the materials include tools that help both teachers and students monitor progress and growth. Teachers have access to real-time dashboards, editable trackers, and detailed reports that provide insights into individual and class performance. These tools support data-driven instruction and help guide planning for next steps.

In grade 5, students use color-coded progress trackers to set academic goals, reflect on their learning, and celebrate achievements. These supports promote student ownership and encourage active participation in their own learning journey.

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.

In grade 5, the materials include frequent, adaptive checks for understanding embedded throughout lessons. Each puzzle provides immediate, formative feedback through visual animations that reflect students' decisions. This real-time response encourages students to revise their strategies and deepen their understanding.

In grade 5, Puzzle Talks further reinforce learning by including targeted prompts and end-of-lesson comprehension checks. These built-in features support responsive instruction, enabling teachers to tailor support based on student performance and needs.

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	The materials do not include explicit pre-teaching supports for developing academic vocabulary, or unfamiliar references in text.	2/4
3.1c	All criteria for guidance met.	2/2
3.1d	The materials do not include educator-controlled accommodations, such as text-to-speech, content and language supports, or calculators that can be enabled or disabled for individual students.	0/3
3.1e	All criteria for guidance met.	2/2
—	**TOTAL**	7/12

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.

In grade 5, the materials provide explicit scaffolds to support students who have not yet reached proficiency. Teachers have access to reteach prompts, printable journals with visual aids, and embedded sentence frames that guide instruction and support student understanding.

In grade 5, adaptive digital tools offer just-in-time remediation based on student performance. These supports help educators address learning gaps effectively and ensure students can meaningfully engage with grade-level content.

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

In grade 5, the materials include embedded supports to develop academic vocabulary and address unfamiliar references in context. Tools such as the "Labeling Strategy Planner," "Problem-Solving Process" posters, and the "Back to Screen Strategy Planner" guide classroom discussions and reinforce the use of precise mathematical language.

In grade 5, the materials do not provide explicit guidance for pre-teaching new terms or unfamiliar references before instruction begins. This limits opportunities for students to build background knowledge and vocabulary in advance of new learning. As a result, the materials lack structured pre-

teaching supports to fully develop academic language and clarify unfamiliar concepts prior to engagement with the lesson.

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.

In grade 5, the materials provide clear guidance for enrichment and extension activities that support students demonstrating proficiency in grade-level and advanced content. Resources include Bonus and Challenge Objectives, Extension Routines, Math Mats, and creative tasks like storyboards that help students connect math concepts to real-world contexts.

In grade 5, Puzzle Talks incorporate targeted questions designed to deepen student thinking, and teachers have the option to assign next-grade-level content to further challenge advanced learners. These supports encourage critical thinking and provide opportunities for students to extend their learning beyond the core curriculum.

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.

In grade 5, the materials include embedded visual supports within the digital platform and Puzzle Talks, which help reinforce conceptual understanding. These static features provide general support for all students during instruction and gameplay.

In grade 5, the materials do not offer adjustable accommodations that can be tailored to individual student needs. Educators cannot enable or disable tools such as text-to-speech, calculators, or content and language supports. The absence of these customizable features limits the flexibility of the platform to meet the needs of diverse learners.

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.

In grade 5, the materials provide clear guidance and flexible tools that support students in demonstrating understanding through multiple methods. Math Mats and Game Mats help students model problem-solving strategies, and accompanying teacher guides support effective implementation. Puzzle Talks, such as those using the Acorn Factory Game Mat, promote conceptual understanding of division, with structured teacher guidance to ensure consistency.

In grade 5, tools like "Jiji's Choice Board" offer students a variety of options to express their learning in ways that best suit their needs. The Labeling Strategy includes sentence stems to support both verbal

and written expression. These resources collectively promote individualized engagement and encourage students to demonstrate their mathematical thinking in meaningful ways.

3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	The materials do not include explicit educator guidance for highlighting and connecting key features through multiple means of representation.	4/5
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**	11/12

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.

In grade 5, the materials include explicit educator prompts that anchor big ideas and emphasize key patterns, features, and relationships using multiple representations. Tools such as fraction tiles, coordinate grids, and place value models are integrated into lessons to support visual and conceptual understanding. Puzzle Talks and structured discourse questions help students explore concepts like graphing, multiplying fractions, and understanding decimal place value.

In grade 5, while these resources support conceptual development across topics, the materials do not consistently include prompts that activate prior knowledge within each lesson. Additionally, there is a lack of explicit educator guidance for consistently highlighting and connecting key features across different representations, which limits opportunities to fully support students in making meaningful cross-conceptual connections.

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.

In grade 5, the materials provide comprehensive multi-tiered intervention supports that address various instructional formats and student needs. The ST Math Tools and Resources section includes Tier 1 supports such as Journeys and Puzzle Talks, as well as Tier 2 and Tier 3 resources such as tracking reports, facilitation guides, and targeted assignments. These tools promote a range of learning experiences through whole group, small group, and one-on-one instruction.

In grade 5, additional supports, such as the Schedules and Stations resources, help structure guided, independent, and collaborative practice. Educators are equipped with the Data-Driven Action Plan and Targeting Action Plan to analyze student data and implement timely, responsive interventions. These features collectively support differentiated instruction and ensure that all students receive the support they need to succeed.

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

In grade 5, the materials offer enrichment and extension opportunities that promote creative and critical thinking. Students engage in tasks such as designing their own word problems, recording videos to explain their thinking, and participating in ST Math Special Projects that apply mathematical concepts to real-world scenarios.

In grade 5, educators are supported with clear guidance through resources like Extension Routines, Puzzle Talks, and dedicated support documents. These include activity summaries and targeted prompts that help extend learning beyond the core content, allowing teachers to provide meaningful enrichment that is both engaging and manageable.

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

In grade 5, the materials include prompts and educator guidance to support timely and responsive feedback during instruction. Tools like the Math Discourse Facilitation Strategies and the Problem-Solving Process provide sentence stems that encourage students to explain their thinking and deepen their understanding of mathematical concepts.

In grade 5, Puzzle Talks and the Student Support Strategies Quick Reference guide teachers in monitoring student progress and adjusting instruction as needed. Real-time dashboards display live performance data, allowing educators to provide immediate and targeted feedback to support student learning.

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	All criteria for guidance met.	4/4
3.3c	The materials do not include implementation guidance aligned to state-approved bilingual or English as a Second Language (ESL) program models.	0/1
3.3d	The materials do not include embedded guidance for making cross-linguistic connections through oral or written discourse.	4/8
3.3e	This guidance is not applicable to the program.	N/A
—	**TOTAL**	8/13

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.

In grade 5, the materials provide embedded linguistic accommodations for all levels of English language proficiency as defined by the ELPS. Within ST Math Help, the Strategies for Developing Language resource explains how the program supports a language-rich environment where students develop expressive and receptive language through mathematical problem-solving. Each activity is designed to strengthen both academic and nonacademic vocabulary by using *ST Math* games that students have already played, promoting comprehension and a deeper understanding of math concepts.

The Strategies for Developing Language section includes the Back to Screen Strategy Planner and Language Strategy Planner, which provide language-focused supports, sentence frames, and partner activities that are differentiated by complexity. Puzzle Talks extend this support by offering tiered lessons that present mathematical ideas with visual models and animations, lowering language demands while

building academic vocabulary. These resources ensure that students at all proficiency levels can engage with the content.

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

In grade 5, the materials include Spanish-language resources and general sentence stems to support emergent bilingual students; however, these supports are generic and not specifically aligned with any state-approved bilingual or ESL program models, such as dual language immersion or ESL pull-out.

In grade 5, the sentence stems included in the problem-solving process are not differentiated by language proficiency level, limiting their usefulness for students at varying stages of English development. This lack of adaptability may hinder students' ability to fully engage with academic content.

In grade 5, the materials do not provide instructional strategies or professional development tools tailored to support bilingual or ESL program implementation. There is no guidance to help educators effectively integrate the materials within the context of Texas-approved language 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.

In grade 5, the materials provide embedded guidance to support emergent bilingual students in developing academic vocabulary and comprehension through oral discourse. Puzzle Talks offer English and Spanish sentence stems and discussion prompts that encourage students to explain their thinking on concepts such as volume and fraction tiles. Written discourse is supported through journal tasks and graphic organizers that promote the use of precise mathematical language.

In grade 5, students also build background knowledge through guided oral discussions that connect familiar concepts to new problem-solving situations. These structured conversations help bridge prior understanding with grade-level content and support language development through contextual learning.

In grade 5, the materials do not include explicit strategies for making cross-linguistic connections. There is no embedded guidance for using cognates, comparing language structures, or leveraging students' home languages to deepen understanding. This limits opportunities for students to strengthen academic language through oral or written discourse using cross-linguistic supports.

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.

In grade 5, the materials include practice opportunities throughout the learning pathways that require students to demonstrate deep understanding aligned to the TEKS. The Journey structure sequences objectives and puzzles in increasing complexity, supporting the development of conceptual mastery. Students typically complete five to eight puzzles per level to show proficiency before progressing to the next stage. Puzzle Talks provide additional opportunities for mathematical discourse and the use of visual models to reinforce learning.

In grade 5, the program's spatial-temporal design allows students to manipulate digital objects and build connections between visual representations, mathematical language, and symbols. Embedded assessments within the learning pathway support data-driven instruction and ensure alignment with the TEKS expectations, helping educators monitor student progress and adjust instruction as needed.

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.

In grade 5, the materials present a clear progression of questions and tasks that increase in rigor and complexity, helping students work toward mastery of both grade-level and advanced TEKS. This structured design ensures that students build on prior knowledge while engaging in more challenging content over time.

In grade 5, enrichment and extension opportunities are embedded throughout the program, including Puzzle Talks, adaptive challenges, and special projects. Teacher resources offer scaffolded guidance, discourse prompts, and look-fors that support deeper understanding and promote critical thinking in the classroom.

4.2 Coherence of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.2a	All criteria for guidance met.	1/1
4.2b	All criteria for guidance met.	1/1
4.2c	All criteria for guidance met.	4/4
—	**TOTAL**	6/6

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

In grade 5, the materials demonstrate horizontal coherence by connecting mathematical ideas through patterns and relationships across topics. For example, the Plotting on the Coordinate Plane Puzzle Talks build on students' prior experiences with number lines to support the development of coordinate graphing skills. Visual models and educator prompts promote meaningful discourse and strengthen conceptual links.

In grade 5, number lines are used consistently across instruction in fractions, multiplication, rounding, place value, and equations, reinforcing their role as a foundational tool. The spiral design revisits key concepts throughout the year, supporting ongoing skill development and reinforcing prerequisite knowledge across content areas.

4.2b – Materials demonstrate coherence vertically across concepts and grade bands, including connections from grade K–6, by connecting patterns, big ideas, and relationships.

In grade 5, the materials include a vertical alignment PDF that clearly shows how learning objectives connect across grades K–5. This document helps illustrate the progression of concepts and supports instructional planning across grade levels.

In grade 5, the consistent use of visual tools, such as strip diagrams, area models, and number lines, reinforces prior knowledge and builds a strong foundation for future learning. These models promote conceptual understanding and demonstrate clear vertical coherence throughout the curriculum.

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.

In grade 5, the materials support both vertical and horizontal coherence by connecting prior knowledge to current and future mathematical concepts. Students build on foundational number sense to divide

multi-digit numbers using strategies such as partial quotients and place value, reinforcing conceptual understanding.

In grade 5, visual models such as number lines and area models are used consistently across grade levels to support schema development. The materials also emphasize how current skills, such as division, form the basis for future concepts like algebraic reasoning, helping students see the progression of mathematical learning over time.

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.

In grade 5, the materials embed spaced retrieval opportunities through a spiral design that revisits key skills and concepts over time. Students engage with mathematical topics multiple times, each at increasing levels of complexity. For example, volume is first introduced by counting cubic units and later reinforced by calculating volume using base area and height.

In grade 5, the "Division Algorithm—Partial Quotients" Puzzle Talk highlights how students apply number sense and place value understanding to divide multi-digit numbers. These intentional recursions help strengthen long-term retention, deepen conceptual understanding, and reinforce meaningful connections across math topics.

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

In grade 5, the materials integrate interleaved practice by revisiting key concepts across learning pathways. Students engage in complex, multi-domain tasks, such as those in Math Challenge 5, which require them to apply prior knowledge with flexible thinking. The spiral structure reinforces topics like volume and multiplication by reintroducing them in more advanced contexts.

In grade 5, Puzzle Talks further support this approach by including prompts such as "Where have you seen this before?" to help students make meaningful connections. This instructional design promotes deeper understanding, sustained retention, and the transfer of learning across various math concepts.

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 models and representations for mathematical concepts and situations.

In grade 5, the materials offer frequent opportunities for students to interpret, analyze, and evaluate mathematical models. For example, in the "Multiplying Whole Numbers and Fractions" Puzzle Talk, students use fraction tiles to represent real-world scenarios and compare visual strategies. The Multiply by 10, 100, and 1,000 game encourages students to explore place value patterns using interactive models.

In grade 5, additional tasks such as the "Adding Fractions with Unlike Denominators" Puzzle Talk prompt students to interpret fraction models, find common denominators, and justify their reasoning. The "Dividing by Unit Fractions" lesson further supports model-based reasoning with more complex fraction operations. These activities promote flexible thinking and deepen conceptual understanding through a variety of meaningful visual representations.

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

In grade 5, the materials provide clear opportunities for students to create both concrete models and pictorial representations of mathematical situations. The "Suggested Manipulatives" document includes objective-specific tools that support hands-on modeling and help students visualize abstract concepts. For example, in the "Plotting on the Coordinate Plane Puzzle Talk," students use a Coordinate Grid Math Mat to represent coordinate points.

In grade 5, similarly, in the "Subtracting Fractions with Unlike Denominators" Puzzle Talk, students use fraction strips and math mats to model fraction subtraction. Puzzle Talk Math Mats also encourage students to express their thinking through drawings. These resources promote student-centered modeling and support both concrete and pictorial representation, aligning with the expectations of the indicator.

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

In grade 5, the materials offer meaningful opportunities for students to apply their conceptual understanding to new problems and real-world contexts. In the Plotting on the "Coordinate Plane" bonus puzzle, students explain their reasoning, explore multiple strategies, and compare solutions. The "Layering to Find Volume" Puzzle Talk connects volume concepts to a practical task involving layered cylinders.

In grade 5, additionally, the Interpret Expressions games present varied tasks that require students to flexibly apply prior knowledge in unfamiliar situations. Throughout the learning pathway, the task design and objectives consistently promote critical reasoning, concept transfer, and increasingly complex thinking.

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.

In grade 5, the materials effectively support automaticity and fluency through structured and targeted tasks. Fact Objectives guide students from using visual models to understanding symbolic representations, particularly in reinforcing multiplication and division facts up to 100.

In grade 5, leveled tasks are designed to build both speed and accuracy, while embedded fluency routines provide consistent practice. These components help students develop efficient computation strategies, allowing them to engage more deeply with complex mathematical concepts.

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

In grade 5, the materials provide consistent opportunities for students to develop efficient, flexible, and accurate mathematical procedures. In the Interpret Expressions games, students build procedural fluency by working with variables and parentheses, exploring mathematical structure, and simplification. The Multiplication Algorithm games guide students from multiplying by powers of ten to using partial products, and eventually, the standard algorithm.

In grade 5, Puzzle Talks, such as Division with Fractions and Whole Numbers, incorporate visual models to support accurate computation. Tasks involving fraction operations encourage students to use flexible strategies as they transition from concrete models to abstract representations. These components collectively reinforce deep thinking and procedural fluency across a range of mathematical contexts.

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

In grade 5, the materials provide meaningful opportunities for students to evaluate mathematical representations, strategies, and solutions for efficiency, flexibility, and accuracy. In the Division with Fractions and Whole Numbers Puzzle Talk, students use visual models, compare different methods, and engage in reflective discussions to assess their approaches.

In grade 5, games with automatic feedback support accurate procedures, while Look-Fors in the Multiplying Whole Numbers and Fractions tasks guide students in evaluating how effectively their models represent problem contexts. These tasks encourage critical thinking, strategic decision-making, and deeper conceptual understanding throughout the learning pathway.

5.2d – Materials contain guidance to support students in selecting increasingly efficient approaches to solve mathematics problems.

In grade 5, the materials provide clear guidance to help students select increasingly efficient strategies for solving problems. The "Puzzle Talk Facilitation Guide" includes prompts such as "Solve it without using ___" and "Show two ways to solve it. Compare the two," encouraging strategic thinking and self-reflection.

In grade 5, instruction builds from visual models such as number lines and fraction grids to more abstract methods, including the standard algorithm. Students also engage with virtual manipulatives to add fractions with unlike denominators and explore fraction division, reinforcing both conceptual understanding and procedural efficiency.

5.3 Balance of Conceptual Understanding and Procedural Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.3a	All criteria for guidance met.	2/2
5.3b	All criteria for guidance met.	3/3
5.3c	All criteria for guidance met.	6/6
—	**TOTAL**	11/11

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

In grade 5, the materials clearly emphasize both the conceptual and procedural components of the TEKS. The Objective and Puzzle Talk Scope and Sequence links each learning goal to the TEKS and breaks it into game-based steps that balance conceptual understanding with procedural skill.

In grade 5, in the "Multiplying Whole Numbers and Fractions: Area Model" Puzzle Talk, students build area models to visualize multiplication before solving, helping them connect reasoning to calculation. The Multiplication Algorithm section then transitions students from these visual models to the standard algorithm, reinforcing procedural fluency.

In grade 5, the materials also support conceptual development in topics like decimals by progressing from concrete objects and expanded form to number line placement. This structured progression ensures instruction integrates visual modeling, mathematical reasoning, and algorithmic fluency.

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

In grade 5, the materials consistently provide purposeful opportunities for students to engage with concrete, pictorial, and abstract models. Tools like the Pie Monster Game Mat offer hands-on support aligned to specific learning objectives, helping students build a strong foundational understanding through concrete experiences.

In grade 5, activities such as the Wall Factory game help students connect visual block configurations to algebraic expressions, reinforcing the transition from pictorial to abstract thinking. Similarly, Puzzle Talks such as "Adding Fractions with Unlike Denominators" prompt students to explore visual models before moving into symbolic notation.

In grade 5, the Robot Patterns activity further supports this progression by guiding students from hands-on manipulation to abstract reasoning. These components align with the TEKS and promote conceptual depth through a consistent use of the concrete–pictorial–abstract (CPA) approach.

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.

In grade 5, the materials support students in connecting, creating, defining, and explaining both concrete and representational models to abstract mathematical concepts. Students engage in hands-on tasks, such as building rectangular prisms with unit cubes, and then apply volume formulas to symbolically represent those models. Place value disks are used to help students visualize decimals and explain the relationship between physical models and numerical representations.

In grade 5, Puzzle Talks and games promote the use of multiple strategies, supported by visual explanations and discourse prompts that bridge models and algorithms. Feedback and scaffolds guide students through the concrete–representational–abstract progression, reinforcing deep conceptual understanding aligned with the TEKS.

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	All criteria for guidance met.	2/2
—	**TOTAL**	8/8

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

In grade 5, the materials provide opportunities for students to develop academic mathematical language through visuals, manipulatives, and structured strategies. In Suggested Manipulatives – Alien Bridge Game Mat, students use graph paper, fraction tiles, and game mats to model fraction multiplication and explain their thinking using academic terms.

In grade 5, Strategies for Developing Language – "Labeling Strategy Planner," students label what they notice in tasks using sentence frames and academic vocabulary, with the option to write in English or their home language. The "Adding Fractions with Unlike Denominators" Puzzle Talk – Slides and Materials includes number lines, fraction bars, and fraction strip math mats to support vocabulary like numerator, denominator, and common denominator.

In grade 5, ST Math Help – Sentence Frames, students use provided sentence starters to explain math concepts with precise language. However, the materials do not consistently include structured writing tasks, vocabulary journals, or repeated opportunities for students to write using academic vocabulary across lessons.

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.

In grade 5, the materials provide embedded educator guidance that scaffolds and extends students' use of academic mathematical vocabulary. In Strategies for Developing Language – Back to Screen Strategy Planner, students describe what is happening during a Puzzle Talk while their partner cannot see the screen. The planner includes sentence frames that support vocabulary development and help students explain mathematical ideas using precise language.

In grade 5, ST Math Puzzle Talk – 5th Grade – Student Discourse Section, the materials include prompts that require students to explain or justify their answers using academic vocabulary. These questions

appear after tasks and are designed to extend vocabulary use through structured peer and whole-class discussions.

In grade 5, ST Math Help – The Problem-Solving Process: Sentence Stems, the materials provide sentence frames for each phase of the problem-solving process. These frames give educators a tool to scaffold students' use of vocabulary during mathematical explanations, supporting both oral communication and structured thinking.

In grade 5, Lesson-Level Resources – Visual Fraction Multiplication: Discourse Questions, the teacher guide includes questions that prompt vocabulary-rich dialogue during instruction. However, the materials do not include dedicated tasks for students to use academic vocabulary in written responses. The program lacks writing prompts, vocabulary journals, or structured assignments that require students to apply mathematical language in written form. As a result, the materials emphasize oral use of vocabulary but provide limited support for developing written academic language.

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

In grade 5, the materials include embedded guidance to support student use of mathematical language in discourse. In "Visual Fraction Multiplication – Discourse Questions," the materials provide prompts for educators to ask during instruction to guide student explanations and the use of academic terms.

In grade 5, the "Puzzle Talk Facilitation Guide – Foster Discourse" includes targeted teacher prompts that encourage students to define vocabulary, justify reasoning, and clarify their thinking using precise mathematical language. In the "Adding Fractions with Unlike Denominators Puzzle Talk – Discourse Questions," students respond to prompts such as "How should we partition the number line?" and "What should we do to the fractional pieces?" to explain reasoning using content-specific vocabulary.

In grade 5, ST Math Puzzle Talk, students discuss mathematical terms and visualize them using interactive digital tools. While the materials support vocabulary use in oral discourse, they do not include structured tasks that require written application of academic vocabulary, such as written justifications or vocabulary-based responses.

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

In grade 5, the materials include embedded guidance that supports mathematical conversations where students hear, refine, and use math language with peers. In "Visual Fraction Multiplication – Discourse Questions" and "Adding Fractions with Unlike Denominators Puzzle Talk – Discourse Questions," students respond to prompts such as "How should we partition the number line?" to explain reasoning and compare strategies.

In grade 5, the "Puzzle Talk Facilitation Guide – Foster Discourse" provides teacher guidance on how to prompt peer interactions and respond when students need help clarifying or expanding their thinking. In the ST Math "Puzzle Talk – 5th Grade – Student Discourse" section, materials offer structured questions that encourage students to justify answers and engage in collaborative discussion.

In grade 5, the materials support oral peer dialogue through structured prompts and facilitation guidance; they do not include opportunities for collaborative writing or structured critique of peer responses in written form.

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.

In grade 5, the materials include embedded guidance that anticipates a variety of student answers and supports educators in redirecting inaccurate responses. In "Visual Fraction Multiplication – Look-Fors" and "Adding Fractions with Unlike Denominators Puzzle Talk – Look-Fors," the materials list common and exemplar responses for student tasks. These include recognizing equivalent fractions, selecting and adjusting denominators, and using models, like number lines, to explore solutions.

In grade 5, "Student Support Strategies – Problem-Solving Process," the materials provide redirection prompts at various stages of problem-solving. For example, educators can ask clarifying questions like "What do you already know about this problem?" to help guide student thinking. The "Facilitate Using the Problem-Solving Process – When Your Students Struggle With . . ." expands on this with additional targeted prompts that align to specific points of student difficulty.

In grade 5, the materials provide strong verbal support through look-fors, redirection prompts, and sample student thinking. However, they do not include annotated student work or examples of written responses that model how to address or correct misconceptions through writing, limiting support for written feedback and analysis.

5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	All criteria for guidance met.	2/2
5.5c	All criteria for guidance met.	1/1
—	**TOTAL**	4/4

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

In grade 5, the materials integrate the TEKS process standards through various instructional supports. The TEKS Process Standards document connects each process standard to relevant *ST Math* activities and Puzzle Talks, with educator-facing examples and resources. The Problem-Solving Process outlines a five-phase cycle—Notice and Wonder, Predict and Justify, Test and Observe, Analyze and Learn, Connect and Extend—guiding students to approach problem-solving systematically.

In grade 5, the Math Mats allow students to document and communicate their mathematical thinking during independent game play, encouraging reasoning and peer sharing. In All Learning Objectives, content like the "Intro to Volume" lesson demonstrates students engaging in real-world math applications. However, while the process standards are consistently embedded, the materials do not frequently prompt students to independently select from a range of tools or strategies.

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

In grade 5, the materials include a description of how the TEKS process standards are incorporated and connected throughout the learning pathways. The "ST Math and the TEKS Process Standards: Examples and Resources" document provides multiple examples of how process standards appear across grade levels, supporting vertical and horizontal alignment. The facilitation questions embedded in Puzzle Talks outline how students engage in the Problem-Solving Process steps—such as predicting, justifying, and analyzing—demonstrating how process standards are applied across lessons.

In grade 5, the TEKS Process Standards: Connection to Puzzle Talks and related facilitation materials provide clear descriptions of where and how process standards are addressed within instructional components. A course-level table highlights how process standards are linked to content standards and embedded throughout lessons. These resources offer both lesson-specific and course-wide views, ensuring alignment with expectations for integration and connection. The materials meet all requirements for this indicator.

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

In grade 5, the materials include an overview of the TEKS process standards within each lesson. The "TEKS Process Standards" document outlines how process standards are incorporated throughout the program, including specific examples tied to Puzzle Talks and gameplay. The All Learning Objectives resource provides a lesson-by-lesson listing of process standards, ensuring educators can see which standards are addressed in each activity.

In grade 5, the Puzzle Talks and Extensions facilitation questions include prompts that support reasoning, justification, and communication—key components of the process standards. While the documents highlight where the standards appear, the materials would be strengthened by more direct explanations of how student activities connect to each standard.

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.

The grade 5 materials support students in thinking mathematically and making sense of math through consistent engagement with puzzle-based tasks and journaling activities. Students participate in Learn by Doing experiences that connect prior knowledge to new concepts, allowing them to reason through problems and construct understanding. Math journals prompt students to notice, wonder, and predict, encouraging meaningful reflection and sense-making.

To foster perseverance, materials include structured supports such as graphic organizers that help students document and adjust their problem-solving strategies. Students explain their thinking using multiple representations—words, visuals, or equations—and revise their approach through trial and error. Tasks increase in complexity and are intentionally designed to promote productive struggle, helping students build confidence and resilience while developing deeper mathematical understandings.

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

The grade 5 materials support students in understanding that there are multiple ways to solve problems by engaging them in tasks such as multiplying fractions using visual models and symbolic representations. These activities help students explore different strategies and reflect on how the product changes based on the context. Guiding questions prompt students to compare approaches and share how they arrived at their solution.

Materials also promote explanation and justification through sentence stems and discussion prompts found in the "Problem-Solving Process Facilitation Guide." Questions such as, "Is there another way to solve this puzzle?" and "Which strategy is the most efficient?" encourage students to articulate their reasoning. Puzzle Talks and discourse routines further support students in justifying their methods and recognizing the value of multiple valid strategies, fully addressing all three components of the indicator.

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.

In grade 5, materials are intentionally designed to engage students in doing, writing about, and discussing math with peers and educators. Puzzle Talks include structured discourse questions that prompt students to share strategies, justify reasoning, and build understanding through mathematical conversations. These discussions occur throughout lessons, reinforcing concepts in a collaborative setting.

Students also write about math using journal pages that support reflection and explanation of problem-solving processes. Writing tasks are embedded across lessons and may be completed independently or in collaboration with peers or teachers. Facilitation tools provide prompts and structures for both discourse and written reflections, ensuring that students consistently engage with math in meaningful, varied ways. These integrated practices fully address all three components of the indicator.

6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	All criteria for guidance met.	6/6
6.2b	All criteria for guidance met.	4/4
—	**TOTAL**	10/10

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

In grade 5, the Puzzle Talk materials include structured prompts such as "What is your strategy?" and "Which strategy is more efficient?" These prompts require students to share explanations, construct arguments, and provide justifications. Students then reflect on these elements by comparing strategies, evaluating efficiency, and refining their reasoning, as seen in "Intro to Multiplying Fractions." These prompts ensure multiple points of entry and encourage mathematical discussions that emphasize reasoning and strategy evaluation.

The Problem-Solving Process bookmark provides a consistent structure of choosing, explaining, justifying, comparing alternatives, and revising strategies. The "My Reflections" journal pages prompt students to explain what they learned, describe challenges, connect the puzzle to prior knowledge, and justify why their strategy works. These components ensure students consistently engage in explanation, argumentation, and justification, as well as reflection on efficiency and alternative methods.

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

In grade 5, the "Puzzle Talk Facilitation Guide" includes the Respond Thoughtfully section, which equips teachers with prompts to address both correct and incorrect student responses. It guides educators in using misconceptions as learning opportunities to deepen conceptual understanding. Lesson-specific Look-Fors, such as those in "Intro to Multiplying Fractions," highlight anticipated student responses and misconceptions, allowing teachers to provide targeted feedback.

In grade 5, the Puzzle Talk Details and Look-Fors/Discourse sections offer structured prompts to support explanatory feedback based on student thinking. *ST Math*'s Discourse Facilitating Strategies further enhance teacher guidance by providing tools to restate, probe, and clarify reasoning. These combined resources ensure that educators have both the prompts and structured guidance needed to respond effectively to student responses and anticipated misconceptions.