

# MIND Education

Supplemental English Mathematics, 3

ST Math Texas Grade 3

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
<b>Supplemental</b>	<b>9781606653579</b>	<b>Digital</b>	<b>Adaptive</b>

## Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	10	1	Flags Addressed	Not Applicable	0

## Quality Rubric Section

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

The grade 3 materials include a well-organized scope and sequence and Journey Objective Overview that outline alignment to the Texas Essential Knowledge and Skills (TEKS) and identify the mathematical concepts covered. These documents demonstrate clear vertical and horizontal alignment, and the Puzzle Talks scope and sequence shows how learning objectives are connected across the year.

The grade 3 materials do not include consistent integration of the English Language Proficiency Standards (ELPS) to support language development alongside math content. Language objectives and ELPS-aligned strategies are not embedded within the alignment documents or instructional materials.

**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 3, the materials include a comprehensive "Educator Implementation Guide" that provides clear and flexible usage recommendations. The guide supports a variety of instructional contexts, including just-in-time interventions, advanced learner extensions, and full-course implementation. It includes sample daily and weekly schedules, strategic questioning prompts, and the "Teacher Facilitation Bookmark" to assist with planning and instruction.

In grade 3, additional guidance is provided through the "Puzzle Talk Facilitation Guide" and the "Weekly Routine and Pacing Guides," which support lesson pacing and math discourse. These resources are consistent across grade levels and instructional settings, offering actionable strategies to help educators adapt instruction to meet the needs of all students.

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

In grade 3, the materials include a TEKS-aligned scope and sequence that outlines the correlation of state standards to each *ST Math* objective and the accompanying Puzzle Talks. These correlations are clearly organized by grade level and are consistent across scope and sequence documents.

In grade 3, the materials include objective-level pre- and post-quizzes, such as those found in the Objective Pre-Post Quizzes: Learning Objectives. However, they do not include a diagnostic tool or correlation guide that connects student performance on these assessments to recommended individualized skill entry points.

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

In grade 3, the materials include protocols and corresponding guidance to support unit-level internalization. For unit internalization, the materials provide access to the Puzzle Talk Overview Page and the Preparing for This Puzzle Talk section, which outline key vocabulary, objectives, and puzzles to be taught. These tools support educators in previewing and planning instruction aligned to the TEKS.

In grade 3, for lesson-level internalization, the materials include specific learning targets in the *ST Math* "All Learning Objectives: Overview and Standards" document, which outlines learning goals and instructional flow. The Professional Learning Hub also provides asynchronous training modules that guide educators through internalization routines.

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

In grade 3, the materials include both resources and guidance specifically designed to support instructional leaders in effectively implementing the program. The materials include the *ST Math* Walkthrough: Strategies and the Puzzle Talks Walkthrough: Strategies, which offer practical implementation strategies for instructional leaders. These walkthrough tools help leaders monitor fidelity of use and identify areas where additional support may be needed.

In grade 3, the "Administrator Resource" documentation offers guidance on observation and implementation practices, supporting coaching efforts and progress monitoring. Although the materials

do not label these tools as professional development modules, they provide support for instructional leaders in planning, coaching, and guiding implementation.

## 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 3, the materials include TEKS-aligned pre- and post-assessments and mastery checks tied to Puzzle Talks, providing tools to monitor student understanding. Lesson components include suggested time frames found in the *ST Math* "Weekly Routine and Pacing Guide." These resources support instructional planning and progress monitoring.

In grade 3, the materials offer detailed overviews and assessment tools; they do not include lesson overviews or assessment resources that embed ELPS-aligned learning objectives. The lack of explicit ELPS integration limits the materials' ability to support language development alongside math 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 3, the materials provide general family support resources in English and Spanish. These include the "Math Family Guide," "Facilitating Questions" poster, and printable home resources available under the ST Math Help tab. These tools help families support students at home by promoting consistent routines, using math-related table games, and encouraging productive struggle during problem-solving. The materials also offer general guidance on managing frustration and increasing engagement.

However, the family resources do not connect to specific units or learning pathways. They remain at the program level and are not aligned with unit objectives or pacing. Additionally, the materials do not include unit-level family guidance in Spanish, limiting accessibility for some families.



## 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 educator-controlled 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
—	<b>TOTAL</b>	13/16

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

In grade 3, the materials clearly define instructional assessments and their purposes. The materials identify Journal Pages as formative assessments that support monitoring, student accountability, and math writing (ST Math Help: Student Accountability and Agency – Journal Pages).

In grade 3, the Understanding Objective Pre and Post Quizzes section explains how post-quizzes measure growth and help teachers identify gaps between conceptual understanding and symbolic math. The ST Math Help FAQs and Student Quiz Experience sections reinforce these definitions and purposes. The materials present this information with clarity and consistency across components.

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

In grade 3, the materials provide clear and consistent guidance to support accurate administration of instructional assessments. The materials guide teachers through resources such as the Student Quiz Experience (Grades 2+) and Understanding Objective Pre and Post Quizzes, which outline expectations, timing, and administration procedures.

In grade 3, the materials include quiz-taking norms, recommended materials, and strategies for increasing assessment reliability. These supports help teachers administer quizzes with confidence and consistency across grade levels.

### **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 3, the materials include limited accessibility features for instructional assessments. The digital platform allows students to toggle between English and Spanish and provides some visual supports. The materials also offer printable versions of journal pages and quizzes, which enable educators to administer assessments on paper when needed.

However, the platform does not allow educators to enable or disable key accessibility features, such as text-to-speech, calculators, or individualized content and language supports. The materials do not provide flexibility for customizing assessments to meet diverse learner needs. While the printable format supports accessibility in some settings, the digital accommodations remain minimal and do not fully align with expectations. The materials do not include educator-controlled accommodations, such as text-to-speech, content and language supports, or calculators within digital assessments.

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

In grade 3, the materials include diagnostic assessments with TEKS-aligned tasks that feature interactive item types and varied levels of complexity. The program guides students through sequenced puzzle levels that gradually increase in difficulty and format, such as drag-and-drop and application-based problems.

These assessments support conceptual understanding and appear throughout gameplay and instructional sequences as an integrated part of student learning.

### **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 3, the materials include a variety of formative assessments with TEKS-aligned tasks and interactive item types at multiple levels of complexity. The materials embed exit tickets, interactive puzzles, and Puzzle Talks throughout instruction.

These tasks include drag-and-drop, text entry, graphing, and model manipulation. The assessments increase in difficulty as students progress through the content. This structure provides actionable data and supports teachers in delivering differentiated instruction.



## 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
—	<b>TOTAL</b>	<b>5/7</b>

### **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 3, the materials provide clear guidance for addressing student performance trends. When students score low on post-quizzes, the platform recommends structured responses, such as reassigning objectives, reviewing printed quizzes with students, or using manipulatives to strengthen understanding.

The Facilitate Using the Problem-Solving Process section equips teachers with tools for small group instruction, prompting strategies, and in-game scaffolds. These supports help teachers use assessment data to plan targeted, responsive instruction based on student 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 3, the materials include tools that help teachers monitor student progress and growth. Teachers use editable progress-monitoring charts, real-time assessment dashboards, and action plan templates to identify trends and plan targeted interventions.

Students track their learning with visual tools such as percent trackers, usage logs, and goal-setting sheets. These resources promote data-informed instruction and support student engagement through reflection and ownership of learning.

**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 3, the materials provide frequent and adaptive checks for understanding throughout lessons and activities. Each puzzle functions as an embedded formative assessment, offering immediate feedback through visual animations that reflect students' mathematical decisions. This real-time feedback helps students adjust their strategies and deepen their understanding.

In grade 3, Puzzle Talks include end-of-discussion checks for understanding to reinforce learning and support comprehension. These consistent and adaptive features ensure students receive timely support and enable instruction to adjust to individual learning 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 3, the materials provide explicit guidance to support students who have not yet reached proficiency in prerequisite or grade-level concepts. Resources such as the "Supporting Struggling Students Guide" and Facilitation Bookmarks offer targeted strategies, including probing questions and observation tips.

In grade 3, the ST Math Help video models how to assist students when they are stuck, and the "Small Group Strategy Discussion" resource promotes differentiated instruction based on student needs. These supports appear directly within lessons and help teachers scaffold learning effectively so all students can access rigorous 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 3, the materials include embedded supports for developing academic vocabulary and understanding unfamiliar references in text. Resources such as the "Labeling Strategy Planner" and "Problem-Solving Process" posters provide sentence stems and frames to guide academic discussions and reinforce language during instruction. Teachers receive prompts and visual tools to model and support student use of mathematical vocabulary. The "Back to Screen Strategy Planner" and ST Math Help: Sentence Stems offer additional support for helping students interpret unfamiliar terms in context.

However, the materials do not include explicit pre-teaching routines or lesson-specific strategies to introduce vocabulary or references before instruction begins. The materials do not include explicit pre-teaching supports for developing academic vocabulary or unfamiliar references in text.

### **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 3, the materials provide explicit guidance for enrichment and extension activities for students who demonstrate proficiency in grade-level and above-grade-level content. The materials offer Bonus and Challenge Objectives, Extension Routines, and creative projects, such as storyboards, to help students deepen understanding through real-world and curricular connections.

In grade 3, teachers can assign next-grade-level content and mixed-review objectives to extend learning and support advanced students. These resources help educators tailor instruction to meet the needs of high-performing learners.

### **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 3, the materials do not provide educators with the ability to enable or disable individual accommodations such as text-to-speech, content and language supports, or calculators. While the platform includes visual representations that help students access content, these features are not configurable for individual learners.

In grade 3, the materials do not offer tools like adjustable calculators, toggleable language support, or educator-controlled text-to-speech settings. Without customizable accommodations, the platform limits educators' ability to tailor supports to meet specific student needs.

### **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 3, the materials provide guidance to help educators offer options and supports for students to demonstrate understanding in multiple ways. The materials include Math Mats and Game Mats with educator guides that support visual modeling and hands-on representation of math concepts.

In grade 3, Puzzle Talks feature Fraction Strips Math Mats and the Labeling Strategy, which include step-by-step teacher supports and sentence stems to help students explain their thinking. "Jiji's Choice Board" offers students varied ways to show their learning based on individual strengths. These tools allow students to express and represent mathematical understanding beyond traditional formats.

## 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
—	<b>TOTAL</b>	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 3, the materials provide explicit guidance to help educators build student knowledge by anchoring big ideas and highlighting key patterns, features, and relationships through multiple representations. Puzzle Talks prompt students to model and decompose numbers using place value tools and respond to targeted discourse questions. Activities such as comparing fractions and solving puzzles with number lines, strip diagrams, and visual models support deep conceptual understanding.

In grade 3, the materials include strong supports for representation and discourse, but they do not consistently include prompts to activate prior knowledge across all lessons. The materials also do not provide explicit educator guidance for highlighting and connecting key features through multiple means of representation.

### **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 3, the materials provide strong support for multi-tiered intervention across various practice types and instructional settings. The materials include Tier 1 strategies such as Journeys and Puzzle Talks, and offer Tier 2 and Tier 3 supports through tracking tools, facilitation guides, and targeted assignments found in the ST Math Tools and Resources section.

In grade 3, they address guided, independent, and collaborative practice, and provide implementation guidance for whole-group, small-group, and one-on-one instruction through resources such as Schedules and Stations and Facilitating Questions. The Data-Driven Action Plan and Targeting Action Plan help educators analyze data, identify student needs, and plan effective interventions. This structure supports differentiated, targeted instruction to meet diverse learner needs.

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

In grade 3, the materials include enrichment and extension methods that support different forms of engagement and provide clear guidance for implementation. The program offers options such as Bonus and Challenge Objectives, ST Math Special Projects, and Extension Routines that promote critical and creative thinking.

In grade 3, students can record videos, create word problems, or build stories based on puzzles to deepen their understanding. Educators receive support through routine summaries, sample extension activities, and discussion prompts embedded in Puzzle Talks. These resources help teachers extend learning meaningfully beyond the core content.

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

In grade 3, the materials include prompts and guidance that help educators deliver timely feedback during instruction. Resources such as Math Discourse Facilitation Strategies and the Problem-Solving Process provide sentence stems and structured questions to check for understanding, prompt justification, and extend student thinking.

In grade 3, real-time tools like dashboards and Look-Fors help teachers monitor responses and adjust instruction or feedback as needed. These supports promote responsive teaching and reinforce 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 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
—	<b>TOTAL</b>	<b>8/13</b>

**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 3, 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 fosters a language-rich environment where expressive and receptive language naturally develop through mathematical problem-solving. Each activity is designed to build both academic and non-academic vocabulary by using *ST Math* games that students have already played, supporting comprehension and 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, minimizing language demands while

promoting the development of academic vocabulary. These resources work together to ensure students at varying proficiency levels can engage meaningfully 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 3, the materials include translated resources, such as Spanish-language materials and sentence stems. However, they do not provide implementation guidance aligned with state-approved bilingual or ESL program models.

In grade 3, the materials offer general supports, such as "pair students for support," but these strategies are designed for all learners and do not address the specific instructional needs of emergent bilingual students. They lack embedded instructional strategies tailored to language development.

In grade 3, the materials also do not include professional development resources or implementation plans aligned to dual language immersion, ESL pull-out, or other approved models. Without alignment to state-approved language acquisition frameworks, the materials do not support effective implementation in bilingual or ESL settings.

### **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 3, the materials include embedded supports that help emergent bilingual students develop academic vocabulary and increase comprehension through oral and written discourse. Sentence stems in both English and Spanish within the Problem-Solving Process and discussion prompts in Puzzle Talks encourage peer collaboration and the use of precise mathematical language.

In grade 3, the materials also support written discourse through graphic organizers and journal prompts that help students reflect on and explain their thinking. Guided discussions offer opportunities to build background knowledge by prompting students to compare mathematical concepts.

However, in grade 3, the materials do not provide embedded guidance for making cross-linguistic connections. They lack consistent instruction using cognates, translation comparisons, or strategies for linking English with students' home languages. This gap limits language development across all required areas.



**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 3, the materials include practice opportunities throughout the learning pathways that require students to demonstrate depth of understanding aligned to the TEKS. The Journey structure sequences objectives and puzzles in increasing complexity to support conceptual mastery. Each level includes 5–8 puzzles that students must complete correctly to advance.

In grade 3, Puzzle Talks offer additional opportunities for engagement through visual models and mathematical discourse. These discussions encourage students to explain their reasoning and make connections between representations and mathematical concepts.

In grade 3, the program's spatial-temporal design helps students manipulate digital objects and connect those experiences to mathematical language and symbols. Instructional assessments embedded in the learning pathways align with the TEKS expectations and support data-driven instruction.

#### **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 3, the materials provide a clear progression of questions and tasks that increase in rigor and complexity to support proficiency in the mathematics TEKS. The instructional design supports conceptual development by gradually building on previously learned skills and deepening student understanding over time.

In grade 3, the materials integrate enrichment and extension opportunities through Puzzle Talks, adaptive challenges, and special projects. These components encourage students to explore mathematical ideas beyond the core content.

In grade 3, teacher resources include scaffolded guidance, discourse questions, and look-fors that promote deeper understanding and critical thinking. This structure supports both grade-level and advanced learners in building strong mathematical reasoning skills.

## 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
—	<b>TOTAL</b>	6/6

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

In grade 3, the materials demonstrate strong horizontal coherence across grade-level concepts. Lessons and puzzles connect big ideas and patterns across multiple mathematical domains.

In grade 3, the materials consistently use number lines in topics such as fractions, multiplication, rounding, and place value to reinforce mathematical relationships. In grade 3, the "Comparing Fractions" Puzzle Talks help students make connections using fraction strips, pictorial models, and number lines to deepen understanding.

In grade 3, the curriculum design highlights prerequisite skills and follows a logical progression. This structure helps students connect related concepts and view math as an interconnected system.

### **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 3, the materials include a vertical alignment document that clearly outlines content connections across grades K–6. This alignment supports the progression of knowledge and skill development over time.

In grade 3, visual tools, such as strip diagrams and number lines, appear across grade levels to reinforce mathematical understanding. These elements promote vertical coherence by linking concepts through patterns, big ideas, and relationships.

### **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 3, the materials demonstrate strong coherence by connecting students' prior knowledge of concepts and procedures to current and future grade-level learning. The "Objective Learning Progressions" document and embedded video guidance outline how mathematical understanding builds over time.

In grade 3, concepts like fractions are introduced and developed through increasingly complex visual representations—such as shapes, bars, pies, and number lines—that span multiple grade levels. These visuals help students form mental models that support deeper comprehension.

In grade 3, Puzzle Talks on multiplication and division prompt students to connect new learning to familiar strategies, such as using skip counting to understand multiplication. Teacher discourse questions and schema-building tasks further reinforce both conceptual and procedural knowledge across the learning continuum.

## 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 3, the materials provide spaced retrieval opportunities across learning pathways to support long-term retention and conceptual mastery. The program revisits concepts throughout the curriculum, gradually increasing in complexity to reinforce prior knowledge.

In grade 3, in the "Multiplication and Division Relationships" Puzzle Talk, students apply skip counting and multiplication knowledge to develop an understanding of division. Teacher prompts such as "What is the relationship between multiplication and division?" encourage students to make explicit connections between concepts.

In grade 3, the spiral structure of the learning pathways ensures earlier objectives are revisited in new contexts. This design strengthens understanding over time and supports sustained mastery of mathematical concepts.

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

In grade 3, the materials provide interleaved practice opportunities that connect previously learned skills and concepts across learning pathways. The program uses a spiral design to revisit topics through adaptive practice that gradually increases in complexity. Students are prompted to recall and apply prior knowledge with questions like "Where have you seen \_\_\_ before?" and engage with content that spans multiple mathematical domains.

In grade 3, multiplication challenges build on foundational strategies and appear in various contexts. The Math Challenge 3 section includes puzzles that blend multiple concepts and incorporate adaptive scaffolds to support problem-solving, flexible thinking, and long-term retention.

## 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 3, the materials provide multiple opportunities for students to interpret, analyze, and evaluate models and representations of mathematical concepts. In "How Many Legs – Level 1," students begin with visual counting and progress to symbolic multiplication, encouraging deep analysis. The "Decomposing Numbers Beyond 1,000" Puzzle Talk guides students in breaking down 2,764 through structured discussion.

In the "Comparing Two Fractions" Puzzle Talk, students analyze and justify comparisons using fraction models. Journey lessons such as Intro to Symbolic Multiplication and Visual Division help students interpret and evaluate visual representations. These activities consistently support flexible thinking, reasoning, and meaningful mathematical understanding through diverse models.

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

In grade 3, the materials provide clear and repeated opportunities for students to create both concrete models and pictorial representations of mathematical situations. In the "Comparing Two Fractions" Puzzle Talk, students use fraction strips and math mats to model and compare fractions, making their thinking visible. The "Suggested Manipulatives – Grade 3" document recommends specific tools by objective to support hands-on construction of math models.

In grade 3, Puzzle Talk Math Mats and preparation guidance prompt teachers to use visual tools that encourage students to draw and represent their thinking pictorially. These features appear consistently throughout grade 3 lessons and support active learning and conceptual understanding.

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

In grade 3, the materials provide multiple opportunities for students to apply conceptual understanding to new problem situations and contexts. In the "Comparing Two Fractions" bonus puzzle, students share strategies, justify their thinking, and evaluate different solution paths. Multiplication Concepts – Games introduce increasing levels of complexity, prompting students to apply prior knowledge in new, interactive formats.

In grade 3, the "Area" Puzzle Talk uses real-world scenarios, such as calculating the area of a garden, to support the transfer of learned concepts. Tasks throughout the grade 3 Journey vary in context and complexity, encouraging flexible thinking and deeper understanding. These features promote application-based learning and critical 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 3, the materials effectively support both automaticity and fluency in mathematical tasks. The program includes Fact Objectives that build multiplication and division fluency, beginning with visual models such as ten frames, number lines, equal groups, counting blocks, and area models; students then progress to symbolic representations.

In grade 3, structured fluency routines, including leveled multiplication and division games, reinforce fact retrieval and computation speed. To advance through ST Math Journeys, students must demonstrate fluency and automaticity, ensuring ongoing practice and mastery of grade-level content.

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

In grade 3, the materials provide multiple opportunities for students to practice efficient, flexible, and accurate mathematical procedures throughout the learning pathways. In Addition and Subtraction Within 1,000 Strategies, students use number lines and blocks to estimate sums and differences, promoting accuracy and efficiency. In Multiplication Concepts games, students move from visual counting to number lines, repeated addition, and symbolic expressions, supporting flexibility in strategy selection.

In grade 3, the "Multiplication and Division Relationships" Puzzle Talk changes the unknowns within the same problem context to deepen conceptual understanding and encourage procedural adaptability. Immediate feedback throughout the program helps students reflect and refine their strategies as they progress through each objective.

### 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 3, the materials provide frequent opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy. In the "Multiplication and Division Relationships" Puzzle Talk, students reflect on their approach by answering

questions such as, "Is it easier to multiply or divide to solve this puzzle?" In the "Elapsed Time" Puzzle Talk, discourse questions like "How did you decide how much time has elapsed?" prompt students to compare strategies such as using a number line or skip counting.

In grade 3, the Multiplication Concepts games include automatic feedback that helps students assess the accuracy and efficiency of their methods. These features promote ongoing strategy evaluation and encourage students to become flexible, reflective problem solvers.

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

In grade 3, the materials include clear guidance to help students select increasingly efficient mathematical strategies. The "Puzzle Talk Facilitation Guide" provides teachers with sentence stems such as "Show two ways to solve it. Compare the two. Which is the most efficient?" and "Solve it without using \_\_," encouraging reflection and comparison of strategies.

In grade 3, the Multiplication Concepts Journey, students move from concrete approaches like repeated addition to more abstract methods, such as the distributive property. The "Properties of Multiplication" Puzzle Talk prompts students to decompose multiplication problems, helping them identify and apply more efficient strategies as they develop fluency.

## 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
—	<b>TOTAL</b>	11/11

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

In grade 3, the materials explicitly address both the conceptual and procedural focus of the TEKS. The "Objective and Puzzle Talk" scope and sequence connects each learning objective to the TEKS and breaks down instruction through puzzles and games that build understanding step by step. In the Comparing Fractions Puzzle Talk Overview, students use fraction strips and pictorial models to compare fractions with the same numerator or denominator and explain their reasoning. This supports conceptual understanding before introducing procedures.

In grade 3, the Multiplication Concepts: Standards and Games section shows how students use area models to develop conceptual knowledge before progressing to partial products and the standard algorithm. This structure helps teachers balance the "why" and "how" of math, aligning instruction with the intent 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.

In grade 3, the materials provide consistent and intentional opportunities for students to engage with concrete, pictorial, and abstract models. The Suggested Manipulatives – Grade 3 document identifies specific tools, such as game mats for the How Many Legs game, that align with learning objectives and support hands-on, concrete experiences.

In grade 3, the "Fruit Monster" game, used in both the ST Math Journey and Puzzle Talks, reinforces conceptual understanding through pictorial models as students solve multiplication and division problems. These visual supports help bridge the gap between concrete experiences and more abstract thinking.

In grade 3, the "Multiplication Concepts: Build Expressions" activity, students model multiplication visually and connect their thinking to numerical expressions, promoting abstract reasoning. Puzzle Talks and Math Mats guide students through tasks that begin with physical or visual representations and progress toward abstract models. This approach supports the concrete–pictorial–abstract (CPA) progression

outlined in the TEKS and helps students build strong conceptual understanding through multiple representation types.

**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 3, the materials include embedded supports that help students connect, create, define, and explain concrete and representational models in relation to abstract mathematical concepts. Students use digital base-ten blocks, arrays, fraction bars, and number lines to model multiplication, fractions, and other concepts, then connect these models to equations and mathematical properties, such as the distributive property.

In grade 3, Puzzle Talks and ST Math Journey games prompt students to explore multiple representations and reflect on their strategies. Teacher notes and guiding questions help students explain how their models connect to abstract expressions, deepening conceptual understanding.

In grade 3, visual feedback and corrective support reinforce learning when students make errors. These features provide consistent opportunities for students to build and explain understanding across multiple representation types.

## 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 3, the materials provide multiple opportunities for students to develop academic mathematical language using visuals, manipulatives, and structured language development strategies. Students use fraction tiles, number lines, and game mats such as the Fractions on a Number Line Game Mat to visually represent mathematical concepts like equivalence. These visual tools help students understand and communicate ideas related to numerators, denominators, and equivalent fractions.

In grade 3, the "Labeling Strategy Planner" supports structured academic language development by prompting students to label visual elements using targeted vocabulary and sentence frames. Students engage in partner work to describe math representations in English or their home language, promoting both oral and written language use. The ST Math Help resources provide specific strategies and sentence frames designed to guide math discourse and vocabulary development across lessons. These supports appear within both instructional tasks and guidance materials, demonstrating consistent integration of language supports aligned with the TEKS.

### 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 3, the materials provide embedded educator guidance that scaffolds and extends students' use of academic mathematical vocabulary in context. The "Back to Screen Strategy Planner" features a structured peer activity where one student describes what is happening on their screen using precise vocabulary while their partner cannot see it. The planner includes sentence frames that support vocabulary development and promote clear verbal communication, giving students meaningful opportunities to practice mathematical language.

In grade 3, the ST Math Puzzle Talk: Student Discourse section offers prompts and guiding questions that require students to explain or justify their thinking after completing tasks. These prompts support vocabulary extension through peer discussion and mathematical reasoning. The Problem-Solving

Process: Sentence Stems provides sentence frames for each stage of problem-solving, helping students express their thinking with academic vocabulary throughout the lesson.

In grade 3, the Fraction Equivalence lesson includes a discourse questions section that guides teacher-led discussions using terms like "halves," "thirds," and "equivalent." The materials promote oral vocabulary use but do not provide structured opportunities for students to apply academic vocabulary in writing. This limits support for developing written communication using precise mathematical language.

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

In grade 3, the materials include embedded guidance that supports student use of academic mathematical vocabulary during discourse. In Fraction Equivalence: Halves, Thirds, Fourths – Discourse Questions, students justify answers using terms like numerator and equivalent.

In grade 3, the "Puzzle Talk Facilitation Guide – Foster Discourse" provides teacher prompts that guide students to explain and define math terms in discussion. The ST Math "Puzzle Talk – Grade 3 – Student Discourse" section prompts support vocabulary use during peer conversations. Puzzle Talk connects vocabulary to visual models, helping students apply terms in context.

In grade 3, the materials do not include tasks that require students to write using academic vocabulary, limiting opportunities to apply precise language in written form.

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

In grade 3, the materials include embedded guidance that supports students in hearing, refining, and using math language with peers. In "Fraction Equivalence: Halves, Thirds, Fourths – Discourse Questions," students respond to open-ended prompts that encourage peer dialogue and explanation.

In grade 3, the "Puzzle Talk Facilitation Guide – Foster Discourse" provides educator strategies to prompt students to rephrase, clarify, and justify their thinking using academic vocabulary. In the ST Math "Puzzle Talk – Grade 3 – Student Discourse" section, students use structured questions to explain reasoning and compare strategies with peers. ST Math Puzzle Talks – Details outlines expectations for student-to-student math talk during discussions.

In grade 3, the materials support verbal discourse through guided conversations but do not include collaborative writing or structured opportunities for students to critique 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 3, the materials include embedded guidance to anticipate a variety of student answers and support redirection of inaccurate responses. In "Fraction Equivalence: Halves, Thirds, Fourths – Look-Fors," the materials identify common and exemplar student responses, such as recognizing and naming equal shares like halves, fourths, and eighths. In ST Math "Puzzle Talk – Grade 3 – Student Look-Fors Section," the materials provide insight into typical student thinking and expected misconceptions, including explanations about when equivalence may not be possible due to area mismatch.

In grade 3, "Student Support Strategies – Problem-Solving Process," the materials offer prompts to guide students through challenges at each step of problem-solving. For example, the guidance suggests asking students what they are trying to figure out or which information is already known to clarify their understanding. In "Facilitate Using the Problem-Solving Process – When Your Students Struggle With . . .," teachers receive additional questions to redirect misunderstandings and deepen student reasoning.

In grade 3, the materials provide consistent verbal support through exemplar responses, look-fors, and teacher prompts. However, they do not include annotated student work or written samples that model misconceptions or corrections in written form, which limits support for identifying and addressing misunderstandings in writing.

## 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
—	<b>TOTAL</b>	4/4

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

In grade 3, the materials appropriately integrate the TEKS process standards throughout the learning pathways. In "ST Math and the TEKS Process Standards – TEKS Process Standards," educators are provided a clear alignment document showing how each TEKS process standard connects to *ST Math* and Puzzle Talk activities, along with examples and resources. This supports instructional planning and reinforces connections between content and process.

In grade 3, the Problem-Solving Process materials guide students through a structured problem-solving model—Notice and Wonder, Predict and Justify, Test and Observe, Analyze and Learn, and Connect and Extend. These stages reflect the TEKS process standards and promote students' reasoning, justification, and communication. Math Mats further support students in communicating their thinking using written and visual representations, encouraging justification, and peer discussion during independent game play.

In All Learning Objectives – Grade 3, the materials provide multiple opportunities for students to apply math to real-world situations and to make conceptual connections across topics. However, while students routinely apply the process standards through tasks and discussions, the materials could be strengthened by more frequent guidance on student choice of tools or strategies during problem-solving.

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

In grade 3, the materials clearly describe how the TEKS process standards are both incorporated into and connected throughout the learning pathways. The "ST Math and the TEKS Process Standards: Examples and Resources" section outlines how process standards are intentionally embedded at multiple points across grade-level instruction. This document provides examples that clarify where and how students apply these standards—such as reasoning abstractly, justifying their thinking, and engaging in mathematical communication.

In grade 3, the facilitation questions found within the Problem-Solving Process and the TEKS process standards further show how these process standards are connected to recurring instructional routines. These prompts are embedded in every Puzzle Talk and support educators in reinforcing mathematical reasoning and discourse, helping students build from prior knowledge, and extend their thinking over time.



In grade 3, the "TEKS Process Standards: Connection to Puzzle Talks" section demonstrates how specific activities directly align with process standards. These connections are not only referenced but also explained through tasks that ask students to reflect, explain, and justify their solutions using math vocabulary.

In grade 3, while these materials explain the use and alignment of process standards, they do not always fully describe how each standard connects across all units or tie them systematically to long-term learning trajectories beyond individual activities.

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

In grade 3, the materials include an overview of how the TEKS process standards are incorporated into each lesson. The TEKS process standards document outlines which process standards are addressed and provides a brief description of how they apply across different lesson components. This allows educators to see the specific process standards embedded in instructional routines.

The All Learning Objectives: Grade 3 resource consistently lists the TEKS process standards tied to each learning objective, ensuring that teachers can plan instruction that connects content with process skills. Additionally, the Puzzle Talks and Extensions facilitation questions offer targeted prompts aligned to specific process standards, supporting instructional delivery within each lesson.

In grade 3, the materials clearly indicate where and how TEKS process standards are embedded; they could strengthen clarity by showing more detailed connections between the standards and the student-facing tasks or assessments within each lesson.

## 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
—	<b>TOTAL</b>	9/9

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

The grade 3 materials provide consistent opportunities for students to think mathematically and make sense of math through puzzle games, learn-by-doing activities, and journal prompts. These tasks promote reasoning, activate prior knowledge, and encourage students to explore multiple solution strategies. Students use math journals to reflect on their thinking by noticing patterns, making predictions, and connecting ideas to deepen understanding.

To support perseverance, materials include tools such as graphic organizers that guide students to evaluate their approach, revise strategies, and use visual models. Scaffolded tasks increase in complexity, and embedded prompts encourage students to problem-solve independently. These supports foster productive struggle and help students develop confidence and persistence in solving challenging problems.

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

Grade 3 materials support students in understanding that there are multiple ways to solve problems by providing tasks that engage students with visual models and interactive puzzles. For example, students work with unit fractions on a number line and iterate through several representations to determine placement, prompting them to consider different solution paths and share their reasoning.

The materials also promote explanation and justification through sentence stems, discourse prompts, and teacher facilitation guides. Prompts such as "Is there another way to solve this puzzle?" and "What if the order of the numbers changed?" encourage students to compare strategies and justify their reasoning. Puzzle Talks and problem-solving process journals offer structured opportunities for students to explain their methods, reflect on alternative approaches, and extend their mathematical thinking. These features collectively support 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 3, materials are intentionally designed to help students make sense of mathematics through regular opportunities to do, write about, and discuss math. Puzzle Talks include structured discourse questions that prompt students to share their thinking and mathematical strategies with peers and educators. These discussions promote reasoning, reflection, and collaborative problem-solving.

Students also engage in writing about math through journal pages, which can be completed independently or collaboratively. These prompts support written reflection on mathematical concepts and strategies. Teachers facilitate meaningful math discussions using discourse guides that align with each task, ensuring students consistently interact with mathematical ideas through doing, writing, and discussing—meeting all components of this 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 3, the Puzzle Talk materials include discourse 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 methods, evaluating efficiency, and refining their thinking, as seen in "Unit Fractions on the Number Line." These structured prompts create multiple points of entry and ensure mathematical discussions focus on reasoning and problem-solving approaches.

The Problem-Solving Process bookmark establishes a consistent routine of choosing, explaining, justifying, comparing alternatives, and revising strategies. The "My Reflections" journals prompt students to state what they learned, identify challenges, connect the puzzle to prior knowledge, and explain why their strategy works. These components ensure that students consistently engage in explanation, argumentation, and justification, as well as reflection on efficiency and alternative strategies. Together, these features demonstrate that the materials fully meet all criteria for this indicator.

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

In grade 3, the "Puzzle Talk Facilitation Guide" provides prompts within the Respond Thoughtfully section to help educators respond to both correct and incorrect student responses. Teachers are guided to restate student thinking, address misconceptions as learning opportunities, and provide targeted feedback to deepen understanding. Lesson-specific Look-Fors within Puzzle Talks, such as in "Unit Fractions on the Number Line," assist teachers in identifying common student strategies or errors and include prompts to address these anticipated misconceptions.

The materials also include structured discourse strategies and detailed lesson guidance that support explanatory feedback. The Look-Fors/Discourse sections within grade 3 Puzzle Talks provide examples of how teachers can extend student thinking and clarify reasoning. Combined with *ST Math*'s Discourse Facilitating Strategies, educators are equipped with clear tools to respond to student responses and misconceptions in real time. These features ensure the materials fully meet all criteria for this indicator.